DOCUMENT RESUME

ED 123 015 RC 009 201

AUTHOR	White, Carolyn Delores
TITLE	The Social Mobility-Fertility Hypothesis: A Racial and Class Comparison Among Southern Females.
INSTITUTION	Texas A and M Univ., College Station. Texas Agricultural Experiment Station.
SPONS AGENCY	Cooperative State Research Service (DOA), Washington, D.C.
REPORT NO	TAES-H-2811; USDA(CSRS)-S-61; USDA(CSRS)-S-81
PUB DATE	Dec 74
NOTE	205p.; MS Thesis, Texas A and M University
AVAILABLE FROM	Inter-Library Loan, Texas A and M University, College Station, Texas 77843
EDRS PRICE	MF-$0.83 HC-$11.37 Plus Postage.
DESCRIPTORS	*Attitudes; *Birth Rate; Caucasians; Comparative Analysis; Educational Mobility; Females; Grade 10; Hypothesis Testing; Marriage; Mobility; Negroes; Occupational Mobility; *Racial Differences; *Rural Areas; Seniors; *Social Class; *Social Mobility; Southern States; Young Adults

ABSTRACT

Utilizing data derived from the Southern Youth Study (a six-year, three-wave panel of 528 rural women from the Deep South), the utility of a version of the Social Mobility Fertility Hypothesis was investigated. Specifically, the relationship between mobility attitudes of sophomores and seniors and their subsequent fertility behavior was assessed by race and class. Anchored by social origins (mother's occupational level and breadwinner's occupation), the measures of social mobility attitudes employed were mobility for self via education and mobility for future family via future mate's occupation. In order to partially replicate previous studies, a multiphase analysis was conducted utilizing contingency tables, social mobility tables, correlation and regression coefficients, and path analytic techniques. Results indicated that: both measures of adolescent social mobility attitudes for seniors were inversely related to subsequent early fertility behavior among white lower class females; only sophomore mobility attitudes for the future family were inversely related to fertility in the white middle class; neither measure of social mobility attitudes had a significant effect on black lower class fertility, but short distance mobility for the future family and long distance mobility for self appeared to have a negative effect on black fertility. (JC)

****
* Documents acquired by ERIC include many informal unpublished *
* materials not available from other sources. ERIC makes every effort *
* to obtain the best copy available. Nevertheless, items of marginal *
* reproducibility are often encountered and this affects the quality *
* of the microfiche and hardcopy reproductions ERIC makes available *
* via the ERIC Document Reproduction Service (EDRS). EDRS is not *
* responsible for the quality of the original document. Reproductions *
* supplied by EDRS are the best that can be made from the original. *
****

ED123015

THE SOCIAL MOBILITY-FERTILITY HYPOTHESIS:
A RACIAL AND CLASS COMPARISON
AMONG SOUTHERN FEMALES

U.S. DEPARTMENT OF HEALTH,
EDUCATION & WELFARE
NATIONAL INSTITUTE OF
EDUCATION

THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL NATIONAL INSTITUTE OF EDUCATION POSITION OR POLICY

A Thesis

by

CAROLYN DELORES WHITE

Submitted to the Graduate College of
Texas A&M University
in partial fulfillment of the requirement for the degree of

MASTER OF SCIENCE

December 1974

Major Subject: Sociology

RC009201

THE SOCIAL MOBILITY-FERTILITY HYPOTHESIS:
A RACIAL AND CLASS COMPARISON
AMONG SOUTHERN FEMALES

A Thesis

by

CAROLYN DELORES WHITE

Approved as to style and content by:

Arthur G. Cosby
(Chairman of Committee)

James H Copp
(Head of Department)

Wm P Kuvlesky
(Member)

W B Smith
(Member)

December 1974

1151614

ABSTRACT

The Social Mobility-Fertility Hypothesis:
A Racial and Class Comparison
Among Southern Females. (December 1974)

Carolyn Delores White, B.S., Louisiana State University
Chairman of Advisory Committee: Dr. A. G. Cosby

The primary objective of this thesis is to assess the utility of a version of the Social Mobility-Fertility Hypothesis in explaining the early fertility behavior of a panel of southern women. Specifically, the study focuses on the relationship between mobility attitudes developed during adolescence (the sophomore and senior years in high school) and subsequent early adult fertility and incorporates racial and class comparisons of that relationship. The Southern Youth Study -- a six year, three-wave panel including 528 non-metropolitan women from six states in the Deep South -- is the source of the data.

Various statistical techniques are used in the multiphase analysis in order to partially replicate the research of previous studies. These techniques include contingency tables, social mobility tables, correlation and regression coefficients, and path analytic techniques. Two measures of social mobility attitudes are used in the analysis -- mobility for self through education and mobility for future family through future mate's occupation. Each of these measures are also anchored by social origins.

The results indicate that both measures of adolescent social mobility attitudes at the senior year of high school are inversely related to subsequent early fertility behavior among the white lower class females. On the other hand, only sophomore mobility attitudes for the future family are inversely related to fertility in the white middle class. Neither measure of social mobility attitudes has a significant effect on fertility for the black lower class females under the perspective of a linear model. However, attitudes for short-distance mobility for the future family and long-distance mobility for self appear to have a negative effect on fertility for the blacks. The theoretical implications of these findings are then discussed, and limitations of the study are presented with suggestions for future research.

To Beto Brunn, a significant other.

ACKNOWLEDGMENTS

This research would not have been possible without the support of the Agricultural Experiment Stations in Alabama, Georgia, Louisiana, Mississippi, South Carolina and Texas. Appreciation is extended for the efforts and cooperation of the project leaders in those states and their assistants who participated in the design and data collection of the S-61 and S-81 projects.

To my thesis advisor, Dr. A. G. Cosby, I would like to express my appreciation for his encouragement and guidance in the development of this thesis, and particularly for his patience as I endeavored to become a sociologist. Dr. W. P. Kuvlesky also offered many valuable constructive criticisms. Appreciation is also given to Dr. James H. Copp, Dr. J. Steven Picou and Dr. W. B. Smith for their numerous helpful suggestions.

Efrain Escobedo assisted me in numerous tedious tasks for which I am grateful. Jack Grant was kind enough to draft the figures in this thesis. Recognition should be given to Linda Dingman, Nancy Huckaby, and Betsy Strode, among others, for their clerical assistance.

I would like to express my sincere indebtedness to those who patiently functioned as sounding boards, endured my insanities, and still remained my friends as I worked on this thesis -- not the least of whom is Sue Richardson.

TABLE OF CONTENTS

ABSTRACT. iii

DEDICATION. v

ACKNOWLEDGMENTS vi

LIST OF TABLES. xii

LIST OF FIGURES xiv

CHAPTER I. INTRODUCTION. 1

Trends in Fertility Research. 2

The Static Approach 3

The Evaluative Approach 6

The Dynamic Approach. 10

CHAPTER II. THE SOCIAL MOBILITY FERTILITY HYPOTHESIS: THEORY AND EMPIRICAL RESEARCH. 14

Some Salient Social Mobility Concepts 14

The Social Mobility Model Versus the Status Attainment Model 17

The Underlying Assumptions of the Social Mobility-Fertility Hypothesis. 18

The Conceptual Dimensions of the Social Mobility-Fertility Hypothesis. 26

Review of Empirical Research. 30

The Behavioral-Behavioral Dimension 30

Fisher's Biological Determinism Hypothesis. 30

Mobility and Fertility Among Homogeneous Class Groupings 31

Mobility and Fertility Among Heterogeneous Class Groupings. 36

Research Using Correlation and Regression Analysis 50

The Behavioral-Attitudinal Dimension 58

The Attitudinal-Behavioral Dimension 60

The Attitudinal-Attitudinal Dimension. 62

A Critical Comment 62

CHAPTER III. DATA AND METHODS. 64

The Southern Youth Study 66

Source of Data 66

Collection of Data 71

Indicators and Measurements. 75

Social Origins 75

Breadwinner's Occupation 76

Educational Level of Mother. 76

Mobility Orientations for Desired Mate 77

Occupational Aspiration for Mate 78

Occupational Expectation for Mate. 78

Level of Occupational Aspiration for Mate. 78

Mobility Orientations for Self 79

Educational Aspirations. 79

Educational Expectations 80

Level of Educational Aspirations 80

Intergenerational Mobility Measures. 80

Intergenerational Occupational Mobility 81

Intergenerational Educational Mobility 81

Early Fertility Behavior. 82

Socioeconomic Class 82

Structural Characteristics of the Population. 84

Non-Metropolitan Origins. 85

Status Placement. 85

Family Structure. 86

Religion. 87

Rationale and Description of Analytical Procedures. . . 88

Phase I 88

Phase II. 90

Phase III 91

Phase IV. 92

Phase V 94

CHAPTER IV. ANALYSIS. 99

Phase I: Contingency Tables Relating Social Mobility and Parity. 99

Level of Educational Aspirations and Parity 100

Level of Occupational Aspirations for Desired Mate and Parity 102

Summary of Phase I. 104

Phase II: Social Mobility Tables 105

Level of Educational Aspirations by Educational Level of Mother 107

Level of Occupational Aspirations for Desired Mate by Class of Origin. 107

Summary of Phase II 109

Phase III: Contingency Tables Relating Intergenerational Mobility Attitudes and Parity 112

Intergenerational Educational Mobility and Parity. 112

Intergenerational Occupational Mobility for Desired Mate and Parity 114

Summary of Phase III. 116

Phase IV: Correlation and Regression Analysis of Intergenerational Mobility Attitudes and Early Fertility 118

Correlation Analysis. 118

Regression Analysis 124

Summary of Phase IV 130

Phase V: Path Analysis 131

Intra-Model Analyses. 132

Model I: The White Lower Class 132

Model II: The White Middle Class 135

Model III: The Black Lower Class 138

Inter-Model Analyses. 141

Class Comparisons 141

Racial Comparisons. 142

Summary of Phase V. 143

CHAPTER V. SUMMARY, LIMITATIONS, AND IMPLICATIONS 145

Introduction. 145

Summary of Empirical Findings. 147
Theoretical Implications 150
Limitations and Implications for Future Research 156
Generalizability 156
Quality of Data. 158
Measurement Error. 159
Choice of Variables. 162
The Model. 163

REFERENCES. 165

APPENDIX A. FREQUENCIES BY RACE AND CLASS OF MEASURES, COMPOSITE VARIABLES, AND STRUCTURAL CHARACTERISTICS. 173

VITA. 190

LIST OF TABLES

Table		Page
1	Examples of Proposed Measures to Reduce U.S. Fertility, by Universality or Selectivity of Impact. .	9
2	Micklin's Propositional Inventory of the SMF Hypothesis Within a Transition Theory Framework. . . .	25
3	Summary Statements of Empirical Research on the SMF Hypothesis Classified by Behavioral Versus Attitudinal Dimension.	29
4	Average Family Size as It Relates to Intragenerational Mobility in the Indianapolis Data.	42
5	Average Family Size as It Relates to Intragenerational Mobility with Controls for Intergenerational Mobility in the Indianapolis Data	42
6	Summary of Suggested Interpretations for Groups Differentiated by Occupational Mobility and SES Level -- Indianapolis Data	43
7	Correlations of Socioeconomic Variables with Live Births -- Indianapolis Study	52
8	Number and Percentage of Adjusted Quota of Females Recontacted at Wave III by State and Race.	74
9	Outline of Analytical Phases	93
10	Bivariate Relationship Between Parity and Level of Educational Aspirations (LEA)	101
11	Bivariate Relationship Between Parity and Level of Occupational Aspiration for Mate (LOAM)	103
12	Summary of Phase I Test of the SMF Hypothesis.	106
13	Social Mobility Tables Comparing Mean Fertility by the Educational Level of Mother (ELM) and the Level of Educational Aspiration (LEA).	108
14	Social Mobility Tables Comparing Mean Fertility by the Class of Origin and the Level of Occupational Aspiration for Desired Mate (LOAM)	110

Table Page

15 Summary of Phase II Test of the SMF Hypothesis. . . . 111

16 Bivariate Relationship Between Parity and Intergenerational Educational Mobility (IGEM). 113

17 Bivariate Relationship Between Parity and Intergenerational Occupational Mobility (IGOM) 115

18 Summary of Phase III Test of the SMF Hypothesis . . . 117

19 Correlations, Means, and Standard Deviations for the White Lower Class 119

20 Correlations, Means and Standard Deviations for the White Middle Class. 122

21 Correlations, Means, and Standard Deviations for the Black Lower Class 125

22 Regression Analysis of White Lower Class Females -- Summary Statistics. 126

23 Regression Analysis of White Middle Class Females -- Summary Statistics. 128

24 Regression Analysis of Black Lower Class Females -- Summary Statistics. 129

25 Correlations, Means, and Standard Deviations for the White Lower Class -- Subset for Path Analysis 133

26 Correlations, Means and Standard Deviations for the White Middle Class -- Subset for Path Analysis. . . . 136

27 Correlations, Means and Standard Deviations for the Black Lower Class -- Subset for Path Analysis 139

LIST OF FIGURES

Figure		Page
1a	Representation of a sinusoidal relationship between fertility and socioeconomic class.	7
1b	Representation of a partially constricted sinusoidal relationship between fertility and socioeconomic class.	7
2	A schematic of Micklin's middle range causal theory of transition.	26
3	Conceptual dimensions of the SMF Hypothesis.	28
4	Featherman's conceptual model of cumulative fertility and marital duration as intervening variables in the process of socioeconomic achievement in the Princeton fertility study.	54
5	Duncan, Featherman, and Duncan's causal model interpreting fertility as a career contingency -- OCG data	57
6	Extension of Heise's path model used in Phase V. . .	96
7	Path model 1 of the relation of fertility behavior to antecedent intergenerational mobility measure (white lower class n = 71)	134
8	Path model 2 of the relation of fertility behavior to antecedent intergenerational mobility measure (white middle class n = 45).	137
9	Path model 3 of the relation of fertility behavior to antecedent intergenerational mobility measures (black lower class n = 108).	140

CHAPTER I

INTRODUCTION

The investigation of linkages between social stratification and patterns of fertility has long been a topic of interest to social scientists having generated research in the areas of economics, demography, and social planning, as well as sociology. One recurring theoretical theme in this tradition of research at both the speculative and empirical levels has been the posited inverse relationship between vertical social mobility and fertility. This theme has been the basis for what is often termed the Social Mobility-Fertility (SMF) Hypothesis. In simplified form, it is postulated that social mobility accounts for fertility differentials among social classes.

The objective of this research is to assess the utility of a version of the SMF Hypothesis in explaining the early fertility behavior of a panel of southern women. Specifically, the study focuses on the relationship between mobility attitudes developed during adolescence and subsequent early adult fertility and examines racial and class differences in that relationship. Data for this analysis was provided by the Southern Youth Study -- a six year, three-wave panel of non metropolitan women from the Deep South.

The substantive significance of this research is three-fold. First, although the SMF Hypothesis has received considerable

---

This thesis follows the literary style of the American Sociological Review.

empirical analysis, the utility of the hypothesis for several critical populations is virtually unassessed. The analysis of the utility of the SMF Hypothesis in this study among disadvantaged non metropolitan females, both black and white, should provide valuable information concerning a grouping that has historically experienced high rates of fertility and low rates of social mobility. Second, the design of the Southern Youth Study allows a clear causal ordering along an attitudinal-behavioral continuum of the variables used to test the hypothesis. The nature of the design, by being a three-wave panel, made possible the measurement of mobility attitudes prior to fertility behavior. It is felt that this clarity in causal ordering should result in a stronger test of the SMF Hypothesis. Third, the conceptualization and improvement in operationalization of social mobility attitudes, by anchoring the measurement in status of origin, allows for a more direct test of the hypothesis than that of prior studies.

Trends in Fertility Research

Research examining the linkages between social stratification and fertility patterns has historically developed along three different lines. These trends may be labeled the static[1], the evaluative and the dynamic approaches. Briefly, it can be stated that the purpose of the static approach has been to establish the existence of fertility differentials by class groupings and the nature of that relationship; the evaluative approach, to predict the consequences of these differentials; and the dynamic approach, to examine the processes which support or hinder the existence of these differentials.

---

[1] Westoff (1953) referred to this cluster of research as the "descriptive, empirical studies."

The Static Approach

The term static approach is used to label this trend of research primarily because social status has been treated as a static phenomenon, a treatment necessitated, in general, by the cross sectional nature of these descriptive studies. Social status has usually been defined as the occupation of the head of the household at a particular point in time, while fertility has been operationalized at both the attitudinal and behavioral levels. However, the traditional procedure has been to operationalize fertility in terms of birth rates or average family size. The fertility differentials among socioeconomic groupings were then related positively or negatively with socioeconomic status (SES). Many researchers have examined "ideal" family size among the various socioeconomic groups (see Blake, 1966; Freedman et al., 1955; Freedman and Sharp, 1954; Freedman, 1959; Yeracaris, 1959; Bachi and Matras, 1964; Stycos, 1965; Gustavus and Nam,1970; Gustavus and Momsen, 1973). Longitudinal studies such as the Growth of American Families (GAF) Study, and the Princeton Study, as well as some cross sectional and time series studies, ie., the Austin Family Survey (Bean, 1973) or the Detroit Area Study, have used other operationalizations of fertility -- expected and desired fertility.

Berent (1952) believed the existence of a negative association between SES and fertility behavior was so well documented that the relationship has acquired the status of a law. However, Freedman (1961-1962), after overviewing the research in this area, concluded that there was lack of agreement on the existence of a universally valid relation between fertility and status measures. Rather, the research seemed to point to the existence of different relationships in major types of societies, including the preindustrial, the urbanizing and the mature urban. Comparisons of the empirical studies should also cautiously take into account the different societal structures, familial structures and measures of status, all of which may have influenced results.

The association of SES and fertility has been hypothesized, with some empirical verification, to be positive in the preindustrial and mature urban societies, but for differing reasons. The basis of the difference is the perception of the economic value of children. It is assumed that in the preindustrial society children provide labor in family economic endeavors and serve as a social security resource. In contrast, in the mature urban society, children will function essentially as a consumer good which the upper classes can more easily afford.

In the urbanizing society there exists a period of transition from high to low fertility:

> The plausible explanations [for this transition] center on the idea that high status groups live first in the developing urban industrial sectors in which they:

> have superior access to information about the means for fertility control, marry later because of the higher educational standards, have lower mortality rates making fewer births necessary for any desired number of children, learn rational procedures which apply to fertility, find the value of children for economic and other activity is relatively small, acquire higher living standards for themselves and their children which compete with the costs of additional children, become involved in extra-familial activities which compete with additional children for time and attention. (Freedman, 1961-1962:59)

Thus, fertility of those higher in SES is less than for those of lower SES. The amount of literature confirming the existence of this negative association of SES and fertility in the urbanizing society may well justify Berent's presumption of the establishment of a law. Nonetheless, without reference to the societal type, the "law" may be unjustly extrapolated to other types of societies.

Baltzell (1953) was more cautious by restricting his comments to the more industrialized nations of Western civilization and rather than calling the relationship a law, referred to it as a social fact. He also pointed out that some research since 1930 has shown the reverse relationship, a positive relationship, at the higher socioeconomic levels, or no relationship. This type of relationship has been termed the oblique "J" curve (Westoff, 1953).

Kiser and Whelpton (1953) maintained that there exist attitudes and psychological characteristics concerning the "value" of children which are class specific. Assuming that a major difference in the types of societies is the proportion of the population in a particular class, and that Kiser and Whelpton were correct, then one could make the argument that whether the relationship is positive or negative would depend solely on the relative size of the lower, middle and upper classes in a society. For instance, if the "true" relationship is sinusoidal, and the inflection points denote the class divisions (see Figure 1a), then obviously, when the distance from point a to point c is constricted, the "true" relationship will be disguised as almost monotonically positive (see Figure 1b). The result of such a process is again extrapolation since constricting the distance from point a to point c has the effect of underrepresenting the middle and upper classes.

Irrespective of the nature of the "true" relationship between SES and fertility, once the existence of fertility differentials had been established through the static approach, a more speculative trend -- the evaluative approach -- gained impetus.

The Evaluative Approach

The evaluative approach forecasts the "implications" of differential fertility, most often with gloomy predictions for the genetic future. The "better" elements of society are seen as dying out because of underreproduction. Some writers, such as Sorokin, have evaluated this differential fertility as enhancing vertical mobility and thus the open-class system and democratic values. Nonetheless, this positive aspect is presumably offset by the fact that the lower procreation of the upper strata is a waste to society because under eugenic assumptions, by being physically and mentally superior, they

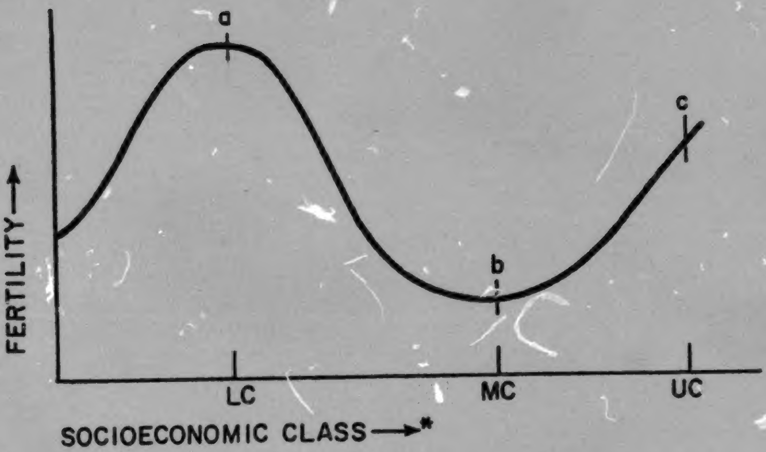


Figure 1a. Representation of a sinusoidal relationship between fertility and socioeconomic class.

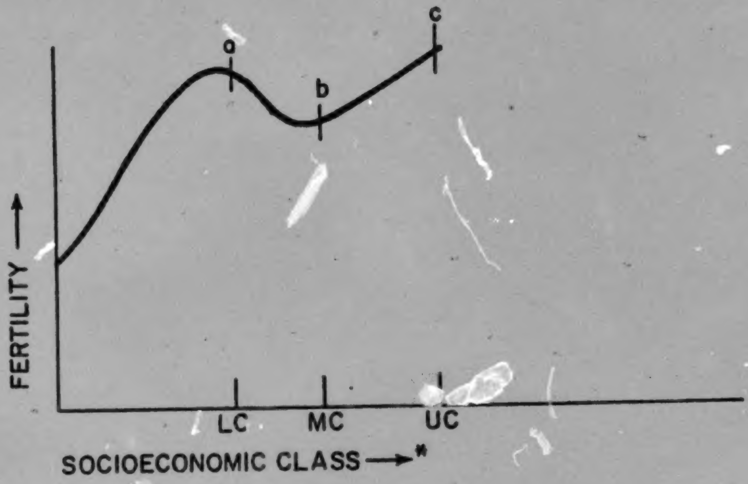


Figure 1b. Representation of a partially constricted sinusoidal relationship between fertility and socioeconomic class.

*LC – LOWER CLASS
MC – MIDDLE CLASS
UC – UPPER CLASS

should prolifically reproduce physically and mentally superior offspring for the sake of "bettering" society. Sorokin's logic was

> If it be true that (1) in a mobile society its upper strata are composed of people physically and mentally superior to the population of the lower classes; (2) that the rate of procreation of the upper strata is lower than that of the lower layers; (3) that better parents leave better offspring; (4) and, finally, that a relative or absolute "vacuum", created through the lower procreation of aristocracy and through the sinking of its failures, continues to be filled by the best elements recruited from the lower societies; then, in such a society, vertical mobility apparently leads to a permanent waste of its best elements. (Sorokin, 1927:493)

Furthermore, apparently the "better" elements recruited from the lower strata also becomes less prolific once they have been vertically mobile. Galton (1892), Wagner-Manslau (1932), Hollingsworth (1957) and Fisher (1958) reached similar conclusions.

The recent concern in the United States with ecology has brought about a great deal of literature which assumes or attempts to establish a relationship between population growth and its distribution and such "social ills" as environmental decay, urban blight, urban violence, crowded highways and parks and high tax levels (Elliot et al., 1970).

Both the genetic and the ecological partisans have written a wealth of material proposing public policies to limit certain types or levels of fertility behavior. Some of the proposed measures would have a universal impact on all socioeconomic classes; some would affect the lower classes to a greater degree. See Table 1 for an outline of proposed measures, some of which were designed for selected

Table 1. Examples of Proposed Measures to Reduce U.S. Fertility, by Universality or Selectivity of Impact.

Universal Impact	Selective Impact Depending on Socio-Economic Status		Measures Predicated on Existing Motivation to Prevent Unwanted Pregnancy
Social Constraints	Economic Deterrents/Incentives	Social Controls	
Restructure family: a) Postpone or avoid marriage b) Alter image of ideal family size Compulsory education of children Encourage increased homosexuality Educate for family limitation Fertility control agents in water supply Encourage women to work	Modify tax policies: a) Substantial marriage tax b) Child tax c) Tax married more than single d) Remove parents' tax exemption e) Additional taxes on parents with more than 1 or 2 children in school Reduce/eliminate paid maternity leave or benefits Reduce/eliminate children's or family allowances Bonuses for delayed marriage and greater childspacing Pensions for women of 45 with less than N children Eliminate Welfare payments after first 2 children Chronic Depression Require women to work and provide few child care facilities Limit/eliminate public-financed medical care, scholarships, housing, loans and subsidies to families with more than N children	Compulsory abortion of out-of-wedlock pregnancies Compulsory sterilization of all who have two children except for a few who would be allowed three Confine childbearing to only a limited number of adults Stock certificate-type permits for children HOUSING POLICIES: a) Discouragement of private home ownership b) Stop awarding public nousing based on family size	Payments to encourage sterilization Payments to encourage contraception Payments to encourage abortion Abortion and sterilization on demand Allow certain contraceptives t be distributed non-medically Improve contraceptive technolo Make contraception truly available and accessible to all Improve maternal health care, with family planning as a core element

Source: Elliot et al. 1970: ix.

TEXAS A&M UNIVERSITY LIBRARY

populations in order to eliminate, or at least attenuate, fertility differentials.

The Dynamic Approach

The third and most recent line of research, the dynamic approach, inquires into the causes of variations in fertility behavior by socioeconomic groupings. It is referred to as the dynamic approach because it treats social stratification as a process rather than as a static variable. One explanation, frequently characterizing this approach is the Social Mobility-Fertility Hypothesis. This hypothesis attempts to explain variation in fertility by SES as either wholly or partially due to the fact that fertility differs among mobile and non-mobile couples.

There are two recognized versions of the SMF Hypothesis -- the strong form and the weak form. Blau and Duncan stated the former as follows:

> The strong form of the hypothesis asserts, in effect, that differential fertility by socioeconomic status, social class, or some similar type of variable is completely explained by social mobility. Classes with low average fertility are those into which individuals or couples with low fertility have moved, whereas classes with high average fertility are those whose ranks have been thinned of low-fertility couples or individuals. Thus, if it were possible to examine only those persons or marriages not undergoing mobility, no class differences in average number of births should appear. (1967:367)

Thus the strong form of the hypothesis postulates that social mobility behavior is wholly responsible for class variations in fertility.

If mobility did not exist, then there would be no class differences in fertility.

The weak form of the hypothesis, as explained by Westoff, asserts:

> Social mobility, both in its subjective and objective dimensions, is directly related to fertility planning and inversely related to the size of planned family -- both relationships persisting within otherwise homogeneous socio-economic groups ... The theoretical extension of these assumptions for differential fertility would be that social class differences in fertility planning and differential fertility itself are related to the differential frequency of socio-economic ambitions and social mobility within and between class levels. (1953:31)

Thus the weak form of the hypothesis, a multivariate explanation, allows for variation in fertility due to factors in addition to the effects of objective and subjective mobility since the frequency of ambitions for upward mobility and the attainment of those ambitions vary by class due to unspecified causes.

Westoff et al. (1960) refer to "dispositions, attitudes, and values" as subjective measures of movement as opposed to objective measures which are "external, visible evidence of change." A clearer distinction between these two measures of movement is that between the aspiration or desire for mobility (an attitudinal measure) and the attainment of mobility (a behavioral measure). Blau and Duncan suggest that differential fertility may not be due to mobility behavior itself, whether upward or downward, "but rather the mere aspiration or desire for mobility" (1967:470). The subjective dimension of the weak form of the hypothesis postulates such a causal sequence.

The "additive multiple classification model" (Duncan, 1966), hereafter referred to as the additive model, is an alternative approach to explaining the causes of differential fertility. However, the additive model is an indirect test of the SMF Hypothesis, e.g., if the additive model is sufficiently substantiated, the SMF Hypothesis is logically contradicted. This approach assumes there is an effect on fertility specific to the class of origin and the class of destination. That is, the class of origin has an effect on fertility and the class of destination has an effect; the fertility of a couple is then "intermediate" between the fertility due to each class effect. This is the opposite of the SMF Hypothesis, for under the assumptions of the additive model there is no need to postulate an effect due to social mobility. That is, in the additive model, it is not the actual movement from class to class that produces fertility differentials, rather it is the combined or "intermediate" effect of successive membership in two or more classes that produce the differentials.

It should be noted that in Duncan's additive model a particular social class has one effect when treated as a class of origin, but another effect when treated as a class of destination. Therefore the effects are not symmetric. Justification for this lies in the fact that class *i* as an origin class may differ from class *i* as a destination class because of the effect of time. Duncan felt this was valid since fertility differentials existed when husband's occupation was measured at two different time points -- at marriage and at the time of the interview.

Hope (1971) presents yet another alternative, the "half-way" hypothesis, so called because he took Blau and Duncan's term intermediate to mean precisely half-way. Though basically the same as the additive model, it differs in two respects. The effects of a class are treated the same, whether the class is a class of origin or destination. Thus the effects are symmetric and the fertility of a couple moving up from class i to class j is the same as that of a couple moving down from class j to i. In addition, the "half-way" hypothesis estimates the fertility of a couple moving from class i to class j as the unweighted mean of the estimates of fertility of non-mobile couples in class i and in class j. Hope also includes terms to measure the effect of direction and distance of movement.

Lastly, the additive model has been expanded to encompass social mobility effects on fertility. This, the "interactive" model, assumes an effect due to direction and distance of movement in addition to the class effects. Therefore, the interactive model is another approach to the SMF Hypothesis, but as presently stated only considers "long-distance" movement.

CHAPTER II

THE SOCIAL MOBILITY-FERTILITY HYPOTHESIS: THEORY AND EMPIRICAL RESEARCH

In the first chapter literature dealing with the existence and dynamics of fertility differentials among SES groups was presented as an introduction to the Social Mobility-Fertility Hypothesis. The SMF Hypothesis was seen as one plausible explanation for fertility differentials. In this chapter the SMF Hypothesis will be developed under the general rubric of social mobility theory. With this goal in mind, several general social mobility concepts which are salient to this research will be overviewed. The origin and underlying assumptions of the SMF Hypothesis will be presented, followed by a structured review of empirical investigations of the SMF Hypothesis and a critical comment on the state of the problem.

Some Salient Social Mobility Concepts

In his classic work on social mobility, Sorokin delineated two inveterate components of social mobility:

> By horizontal social mobility...is meant the transition of an individual...from one social group to another situated on the same level...By vertical social mobility is meant the relations involved in a transition of an individual...from one social stratum to another. According to the direction of the transition there are two types of vertical mobility: ascending and descending. (1927:133)

As sociologists endeavored to employ this concept in empirical research, additional components were discerned. In any definition of social mobility the concept of movement, or "transition," is an integral part. Presently, Sorokin's dichotomy is viewed as one component of the concept "movement" -- the direction of movement. Westoff et al. (1960) perceive four auxiliary constituents -- the reference points of movement; the unit of measurement; the visibility of movement; and the unit of analysis.

In order to calculate or map movement over time, reference points must be established -- at a minimum, the points of origin and destination. Two additional concepts are commonly used which tacitly define where in the life cycle these points are situated:

> The idea of INTERGENERATIONAL mobility involves a PERSON TO PERSON comparison of the social stratum achieved by sons, fathers, and even grandfathers at comparable periods in their lives. INTRAGENERATIONAL, or career mobility, is a concept which usually has been restricted to occupational changes, and refers to the mobility of the SAME INDIVIDUAL from the time of his first full-time job through his working lifetime. (Westoff et al., 1960:377)

In empirical studies these two concepts have been somewhat muddled. For example, intergenerational mobility usually has not been operationalized to reflect father's and son's occupation at comparable periods in their life cycles. Likewise, intragenerational mobility has been measured over time periods ranging from three to twenty years.

A second auxiliary element of movement is the unit of measurement. Westoff et al. distinguish between amount of movement and distance of movement: "AMOUNT involves the proportion of individuals who are upwardly or downwardly mobile within some stratification system. The DISTANCE of mobility, on the other hand, is a measure of the number of 'steps' of upward or downward movement traversed by an individual or a group" (1960:377-378). Analytical methods like social mobility tables generally are concerned with AMOUNT of movement whereas regression techniques utilize the concept of DISTANCE.

Visibility of movement is distinguished as either subjective or objective movement, the correlates of which are presented in Chapter I (see page 10). A theoretical debate continues concerning the extent to which the existence of one of these types of movement affects the other:

> The issue hinges on the extent to which hypothesized subjective dispositions favoring vertical mobility such as those implied in the Protestant Ethic, dependably predict mobility achievement; and conversely, the extent to which a change in life chances, such as increase in income, will produce appropriate changes in attitudes and values. Although the evidence is sparse on these points most pertinent research asserts that there is a positive relationship between subjective and objective mobility. (Westoff et al., 1960:378)

Lastly, the basic unit of analysis for determining movement "in American mobility research has been alternatively directed to the individual, the family, the entire society, or all three .." (Westoff et al., 1960:376). Traditional, or in Mullins' (1973) lexicon -- "standard American Sociology," has most often emphasized the society as the unit of analysis. Carter and Carter (1971) posit this trend has been due to the use of social mobility tables as an analytical technique. The theoretical assumptions underlying that model are inimical to any unit of analysis other than the society. The most recent trend in mobility research, the status attainment model, emphasizes the individual as the unit of analysis. The analytical technique employed in the latter model, path analysis or structural equations, is isomorphic with the theoretical assumption that the process of mobility operates at the individual level (Carter and Carter, 1971:27).

The Social Mobility Model Versus the Status Attainment Model

The interrelatedness of substantive theoretical frameworks and methodological techniques has been well documented. In the preceding discussion five components of the concept of movement were presented. It can be stated in general that the social mobility model which employs social mobility tables as an analytical technique has been primarily concerned with the amount of objective vertical, intergenerational movement at the societal level.[1] The theoretical assumptions underlying the social mobility model assume that there exist societal processes which either enhance or inhibit social mobility. Alternatively, the question is, "To what extent do societal characteristics support or hinder status transference from one generation (father's) to another (son's)?"

In contrast, "...the status attainment model assumes that the process [of social mobility] operates at the individual rather than the societal level. That is, the variables thought to determine position in the occupational structure are explicitly individual characteristics" (Carter and Carter, 1971:27). The status attainment model treats father's status as a characteristic of the son which operates to determine his initial position in the occupational structure. Carter and Carter believe "this redefinition changes the process from intergenerational mobility to intragenerational mobility" (1971:22). Furthermore, the development of social psychological models of status attainment (Sewell et al., 1970) facilitated the incorporation of subjective movement. In addition, the model tests the predicted causal sequence operative in the process of an individual's status placement.

---

[1] Though intragenerational mobility is sometimes addressed, intergenerational mobility has primarily been the concern.

In the expanded status attainment models, fertility is included as a contingent or intervening variable affecting status placement (see Figures 3 and 4). That portion of the total model which evaluates the effect of fertility on status achievement, after individual origin or background characteristics are controlled, is considered a test of the SMF Hypothesis. The question of sociological interest here is, "To what extent does fertility impede or facilitate status achievement?"

The Underlying Assumptions of the Social Mobility-Fertility Hypothesis

The first statement of the SMF Hypothesis, imputed to Dumont, evolved from efforts to explain the decline of fertility in France. In his theory of "social capillarity" Dumont stated, "just as a column of liquid has to be thin in order to rise under the force of capillarity, so a family must be small in order to rise in the social scale" (1890:33). R. A. Fisher provided the following rationale for why this inverse relationship should exist:

> That the economic situation in all grades of modern societies is such as favours the social promotion of the less fertile is clear, from a number of familiar considerations. In the wealthiest class, the inherited property is for the most part divided among the natural heirs, and the wealth of the child is inversely proportioned to the number of the family to which he belongs. In the middle class the effect of the direct inheritance of wealth...is increased by the expense of a first-class education, besides that of professional training, and by the need for capital in entering the professions to the best advantage. At a lower economic level social status depends less upon actually inherited capital than upon expenditure on housing, education, amusements, and dress; while the savings of the poor are deleted or exhausted, and their prospects of economic progress often crippled, by the necessity of sufficient food and clothing for their children. (1958:252)

The strong form of the SMF Hypothesis postulates that the existence of class differentials in fertility is entirely due to the effect of mobility. Lower fertility is assumed to be "a prerequisite for upward mobility, inasmuch as a large family is an impediment for career success" (Blau and Duncan, 1967:413). It is implicit in this version that fertility differentials do not exist among the non-mobile since the average number of children in each social class is presumed to be equal when only the non-mobile are considered. The lower fertility of the upwardly mobile attenuates the average number of children in the class of destination; in the class of origin, the average is inflated due to the exodus of the lower producers. For this reason, fertility differentials exist. The effects of downward mobility are not explicit. Most researchers, with the possible exception of Fisher (1958), are not willing to accept such a restrictive hypothesis.

The weak form is considered the more plausible version of the SMF Hypothesis for several reasons. Postulating an inverse relationship between fertility and mobility, the upwardly mobile are predicted to have fewer children than the non-mobile in their class of origin and the downwardly mobile to have more children. Large families are assumed to be inimical to upward mobility, and in some cases a causal link to downward mobility. It does not presume the effect of mobility is the sole cause of class differences in fertility. In fact, class differences in the fertility of the non-mobile are assumed since the fertility of the mobile is compared to that of the non-mobile in the class of origin and class of destination. Lastly, the weak form of the hypothesis acknowledges the direct effect of these attitudes, values and motives associated with the mobility ethos on fertility.

Bensman and Westoff, presenting the underlying assumptions of the subjective dimension of the SMF Hypothesis explain:

> The mobility-oriented person places a high value on work rather than on family values. This involves in its simplest form devotion of a greater part of one's time to work and work related activities. The duties and obligations involved in the care of the large family involve the sacrifice of valuable work time to family-oriented activities...The leisure-time activities of the mobility-oriented are likely to be extensions and implements of a work-orientation. Leisure time is to

> be used for self-improvement and self-education...Not only the use of leisure time and energy and patterns of association but also the distribution of income expenditures can be expected to reflect this orientation of both consumption and savings, i.e., in the use of income and savings for future mobility-related consumption activities and investment as opposed to its use for immediate material consumption and savings for security. In all these activities, the presence of a large number of children is viewed as disadvantageous. Large family expenditures detract from mobility aspirations in the same way as does a family-oriented distribution of time. Under the mobility ethos, children themselves are perceived as an instrument of mobility either by an exhibition of the proper patterns of behavior which are considered to be characteristic of status achievement or by acquiring and exhibiting social traits of the groups to which the parents aspire. The latter case is predominantly true where the mobility aspirations of the parents are blocked and the drive displaced onto the children. In both cases "quality" of children is viewed as a substitute for "quantity." (1954:2-3)

Therefore, it is hypothesized that persons feeling a desire or need for upward mobility, whether that mobility is realized or not, would have fewer children than those not so oriented; persons who stress familism over mobility orientations would have more children. The rationale for this hypothesis is the assumption that for the mobility oriented, children have more of an instrumental value whereas for the family oriented, they have an intrinsic value.

Assumptions concerning contraceptive behavior also underlie the SMF Hypothesis. The upwardly mobile are assumed to be efficient fertility planners. Inefficient or lack of family planning is offered as a partial explanation for the larger families of the downwardly mobile. As a result of lax contraceptive use, the couple is confronted with the increasing economic burden of children early in the marriage cycle when they can least afford it. As a result, they are unable to maintain their social position and become downwardly mobile.

Scanzoni introduced the concept of "economic alienation" to explain the relationship of familism and downward mobility. Those who have a greater feeling of "economic alienation" attempt to compensate for feelings of "drift, meaninglessness, powerlessness, normlessness" by providing themselves with a "ready-made primary group" (1971:249-251). This would seem to imply a portion of the downwardly mobile "plan" large families, as well as many in the lower social strata, since feelings of "economic alienation" are more prevalent in these two groups.

Kiser and Whelpton (1953:108) assume that the "underlying attitudes and psychological characteristics" which are supportive of mobility aspirations are generally class specific. Peterson (1961:222) assumes that the middle class has higher aspirations and therefore persons therein are more pressured to limit their families. At the same time, however, he speculates that as contraceptive usage permeates all classes equally, the whole problem of class based fertility differentials will disappear. Scanzoni dismisses this as a possibility as long as the lower classes experience "economic alienation" and children considered a "reward" in our society (1971:250).

The additive and half-way models were presented in Chapter I as indirect tests of the SMF Hypothesis. The models are based on the assumption that social mobility results in a change in interpersonal relations and that these changes can be explained by the process of acculturation:

> ...mobile persons are not well integrated in either social class [class of origin or destination]. Without extensive and intimate social contacts, they do not have sufficient opportunity for complete acculturation to the values and style of life of the one group, nor do they continue to experience the full impact of the social constraints of the other. But both groups exert some influence over mobile individuals, since they have, or have had, social contacts with members of both... Hence their behavior is expected to be intermediate between that of the two non-mobile classes. (Blau, 1956: 291)

A similar process is presumed to be operative in the case of geographical mobility.

Micklin (1969), following the call of theorists such as Zetterberg, developed a middle-range causal theory to explain fertility differentials. The theory falls under the general type of theory referred to as transition theory because it attempts to explain the transition from high to low fertility that often comes about with the movement from rural to urban areas, a phenomenon concomitant with urbanization and industrialization. Because it is one of the most comprehensive statements on the subject, Micklin's theory will be presented at length. It incorporates a majority of the previously presented assumptions:

> The first crucial step toward the lower fertility pattern...involves becoming a part of the "urban way of life." Specifically, this means casting aside a set of traditional rural value orientations and employing instead a set of values related to urban-industrial life. As a result of this shift in value orientations there will appear a series of related changes in social relations and patterns of behavior.
>
> One of the most important changes which takes place at

> both the motivational and behavioral levels has to do with a person's orientation toward upward social mobility. The competitive, achievement-based, urban-industrial pattern of life instills, in varying degrees, a desire to raise one's self, or perhaps one's children, to a higher socio-economic level. These aspirations are manifested primarily in the desire for changes in social status)es) and the consumption of material goods. With the increase in aspirations toward upward social mobility comes the recognition, quite likely for the first time, that by limiting the size of one's family, he may better be able to use whatever resources he has available to him for the purpose of actually realizing some degree of social mobility for himself and/or for his family. Children are no longer seen as assets, as they often are in an agrarian setting, but rather as excess baggage which may prevent or slow down the journey to a higher social status. Once a person has recognized the intrinsic value of family limitation, he will search for some method of limiting conception. Among those persons who are most concerned with family limitation, a rational process of selecting among available methods will be followed, the goal being the most efficient method available. For persons who are concerned to a lesser extent, a similar process will be followed, but the emphasis on rational selection and use is missing. At times, inefficient and unsafe methods are used, and in other cases, efficient methods are used inconsistently. The extent to which any person approaches family limitation and contraceptive choice from a rational viewpoint is thus directly dependent upon his degree of concern with family size and his recognition of the consequences of large families. The final step in the process, i.e., the actual ability to limit family size (and/or determine the intervals between children), is dependent upon the consistent usage of efficient contraceptive methods. (Micklin, 1969:489)

From this middle-range theory Micklin derives a set of logically interrelated propositions such that affirmation of one proposition provides support for the whole theory. Table 2 presents his propositional inventory. The theory is presented as a causal theory which links societal processes to the individual decision-making process which affects fertility within the framework of transition theory.

Table 2. Micklin's Propositional Inventory of the SMF Hypothesis Within a Transition Theory Framework. (Micklin, 1969:494)

Proposition 1:	The less the influence of traditional value orientation as reference symbols, the greater the orientation toward upward social mobility.
Proposition 2:	The greater the orientation toward upward social mobility, the greater the concern with limitation of family size.
Proposition 3:	The greater the concern with limitation of family size, the greater the rational usage of contraceptive methods.
Proposition 4:	The greater the rational usage of contraceptive methods, the fewer the number of children conceived.
Corollary 1:	The less the influence of traditional value orientations as reference symbols, the fewer the number of children conceived.
Corollary 2:	The greater the orientation toward upward social mobility, the fewer the number of children conceived.
Corollary 3:	The greater the concern with limitation of family size, the fewer the number of children conceived.

Figure 2 is a schematic of the causal linkages.

The status attainment model can be viewed as the next step in the development of a causal theory. Rather than terminating the causal sequence with fertility, the status attainment model assumes fertility affects the socioeconomic organization. Strictly speaking, this is not a feedback system since the endogenous variables are considered to be dynamic.

SOCIOECONOMIC ORGANIZATION → CULTURAL VALUES → VALUES → CONTRACEPTIVE BEHAVIOR → FERTILITY

Figure 2. A schematic of Micklin's middle range causal theory of transition. (Source: Micklin, 1969:495)

The Conceptual Dimensions of the Social Mobility-Fertility Hypothesis

In previous discussions of the SMF Hypothesis, social mobility has been presented as multidimensional, having a behavioral (objective) and an attitudinal (subjective) dimension. Fertility, likewise, can be conceptually perceived as multidimensional. In fact, the use of the attitudinal dimension of fertility has been prevalent in literature taking the static approach. Some empirical investigations of the SMF Hypothesis have utilized fertility attitudes, operationalized as expected or desired number of children, but the majority of the research has employed fertility behavior.

Justification for the employment of fertility attitudes is based on studies which have investigated the reliability and stability of fertility attitudes in predicting subsequent fertility behavior on the aggregate level (Freedman et al., 1965; Campbell et al., 1963; Westoff et al., 1957; Goldberg et al., 1959). Goldberg and Coombs (1936) contend the increasing use of fertility attitudes is due to three factors: the problems of ex post facto analysis in cross-sectional data; the increasing usage of contraception which makes non-behavioral aspects of fertility more relevant; and the failure of sociologists to explain much of the variance in fertility behavior.[2] However, several new problems arise with the use of fertility expectations. On the individual level, the congruence of fertility attitudes and subsequent behavior is not so high as on the aggregate level. Excess (unwanted or unplanned) fertility becomes increasingly important and is difficult to obtain accurate information about since parents are probably reluctant to say a child was not wanted once it is born (Bumpass and Westoff, 1970:149). Furthermore, since contraceptive efficiency is class based, excess fertility varies by SES (Koos, 1947).

Therefore, four rather than two dimensions of the SMF Hypothesis should be delineated -- the Behavioral-Behavioral dimension, the Behavioral-Attitudinal dimension, the Attitudinal-Behavioral dimension, and the Attitudinal-Attitudinal dimension. Figure 3 below presents a schematic of these four dimensions. Each of these dimensions

---

[2] Commenting on the small amount of variance usually explained in fertility studies, Sagi and Westoff (1936) state they've heard it said a correlation greater than .30 should be treated with suspicion.

SOCIAL MOBILITY	FERTILITY	
	BEHAVIORAL	ATTITUDINAL
BEHAVIORAL		
ATTITUDINAL		

Figure 3. Conceptual dimensions of the SMF Hypothesis.

hypothesizes that vertical social mobility affects fertility. Upward social mobility is postulated to attenuate fertility while downward mobility is postulated to inflate (or attenuate) fertility.

The following review of empirical studies which assess the utility of the SMF Hypothesis has been structured along these four conceptual dimensions (see Table 3). In addition, the Behavioral-Behavioral dimension has been subdivided into four sections in order to facilitate a meaningful synthesis of the results and to provide some basis of comparison to the analytical phases of this thesis. The first section discusses R. A. Fisher's conclusion that upward mobility is dependent on biological factors. Next, research concerned with elite groups of relatively homogeneous destination status, but various origin statuses, are presented. In these studies the research problem has been, "Is fertility behavior inversely related to social origin?" The procedure used has been to compare the

Table 3. Summary Statements of Empirical Research on the SMF Hypothesis Classified by Behavioral Versus Attitudinal Dimensions.

	FERTILITY	
SOCIAL MOBILITY	BEHAVIORAL	ATTITUDINAL
BEHAVIORAL	I. Fisher's Biological Determinism: Inverse relationship (Fisher, 1930) II. Homogeneous Class Groupings: 1 Study found mobility depressing (Baltzell, 1953) 3 Studies found no significant differences (Scott, 1958; Tien, 1961; Boggs, 1957) III. Heterogeneous Class Groupings: 3 Studies found upward mobility depressing; downward, inflating (Berent, 1952; Riemer and Kiser, 1954; Hutchinson, 1961) 2 Studies found mobility depressing regardless of direction (Kantner and Kiser, 1954; Duncan, 1967) 1 Study found no mobility effect when farm migrants excluded (Goldberg, 1959) IV. Correlation & Regression Techniques: 1 Study found a positive correlation for Catholics (Brooks and Henry, 1958) 1 Study found negative correlations but positive correlation in planned families; both correlations larger for farm migrants (Goldberg, 1960) 1 Study found no significant intervening effect of fertility on status (Featherman, 1970) 1 Study found slight positive intervening effect on income; slight negative on occupation (Duncan, Featherman, and Duncan, 1972)	1 Study found mobility depressing regardless of direction (Marcum and Bean, 1974)
ATTITUDINAL	1 Study found conflicting effects (Riemer and Kiser, 1954) 1 Study found positive relationship (Kiser and Whelpton, 1951) 2 Studies found no relationship (Featherman, 1970; Boggs, 1957)	Study - no systematic relationship (Riemer and Kiser, 1954)

fertility of the non-mobile in the class of destination to that of persons who have experienced upward mobility. The third section includes research which employ samples more heterogeneous in class composition and therefore allow comparisons of fertility of the non-mobile in the class of origin and destination to that of the upwardly and downwardly mobile. In general, these studies ignore the distance of mobility. The final section of the Behavioral-Behavioral dimension includes research concerned with the effect of distance of movement on fertility. As a rule, these studies use correlation and regression analytical techniques and do not treat separately upward and downward mobility.

Review of Empirical Research

The Behavioral-Behavioral Dimension

Fisher's Biological Determinism Hypothesis: Fisher (1958) used data abstracted from Who's Who in America to determine if biological factors such as sterility and celibacy or social environment were responsible for fertility differentials by social class. Assuming the effects of acculturation, he reasoned if social environment were the determining factor "...we should confidently expect the families who rise in the social scale to carry with them some measure of the fertility from which they originated" (1958:234-235). Educational level achieved was used as an indicator of mobility since it was assumed that those with a lower level of education had achieved the greater social mobility by being included in Who's Who. Comparing average fertility by educational level, Fisher found that mobility was inversely related to fertility. From this he concluded:

> among Americans who attain a sufficient level of eminence to be included in Who's Who, those whose social promotion has been most striking have, on the average, fewer children than those whose social promotion has been less. Such a result would appear inexplicable on any of the views that connect social environment, and is a striking confirmation...of the theory that the dominating cause lies in the social promotion of the relatively infertile. (Fisher, 1958:255)

Fisher's analysis and conclusions have been criticized on several points: he failed to distinguish between fertility and fecundity; both actual and estimated fertility were included in the data; marital status was not controlled; and the rank ordering of the educational levels may be incorrect.[3] The biological determinism form of the hypothesis has received little attention since Fisher.

Mobility and Fertility Among Homogeneous Class Groupings. Baltzell (1953) tested the SMF Hypothesis using the 770 residents of Philadelphia listed in the 1940 Who's Who in America. Of the 770 persons, 226 were also listed in the Social Register. Listing in the Who's Who but not the Social Register was considered an achieved status whereas listing in both, an ascribed status. In a similar manner, family listing in the 1900 Social Register was considered an indicator of ascribed status while achieved status was indicated by public schooling. In each case, it was assumed that those with an achieved status had experienced social mobility by being listed in Who's Who. On the other hand, those with ascribed status were assumed to be non-mobile. The average number of children of the mobile and non-mobile groups was compared for each indicator, and consistently, mobility was inversely related to fertility.[4]

---

[3] The rank ordering was College & Professional; College & Ph.D.; College; Normal, Business, Trade, Secretarial; High School; Elementary Schools & Home; Professional School only.

Baltzell cautions that any conclusions drawn from such a limited sample must be tentative. However, he feels that these findings provide some insight into the nature of differential fertility, particularly the oblique "J" pattern:

> In other words, fertility declines as one ascends the social-class hierarchy mainly because the requirements of a more expensive pattern of consumption militate against having children and partly because of the internalization of small-family norms already existing in the cultural definitions of the class of destination. Consequently, fertility should be expected to decline at successively higher levels in the social-class hierarchy partly because those persons in higher positions are, on the average more mobile than those below them. On the other hand, as the top of the hierarchy is approached, this inverse differential may be reversed precisely because, in contrast to those immediately below them, social mobility may be less characteristic of persons at the top levels. (Baltzell, 1953:411-412)

That is, he is not certain if the inverse relationship is due to the economic necessity of limiting one's family to attain mobility and the norms for a smaller family in the class of destination, or if it is due to the larger family size of elites because of the impossibility of upward mobility. Therefore, it is important to keep in mind the characteristics of the non-mobile group under consideration.

---

[4] A separate analysis was carried out for women using only listing in the Social Register as an indicator. Indicators of achieved and ascribed status for religion and residence were constructed for the total sample. In all three cases fertility was inversely related to achieved status.

By definition, Baltzell's subjects had not only divergent mobility backgrounds but also differed in general social standing. Scott (1958) examined the SMF Hypothesis using a sample of teachers in England and Wales. The respondents had divergent mobility backgrounds but were equal in SES, in general. Nonetheless, the teachers were stratified within their profession according to whether they were grammar school or non-grammar school teachers and head-teachers or assistant teachers.

With two exceptions, analysis of variance techniques found no association between size of family and mobility to a position in the teacher hierarchy from a class of origin.[5] One exception involved teachers of middle class origin who entered the profession through the emergency training program. These people were generally older and already had larger families when they entered. The other exception was grammar school teachers with a manual class of origin. Scott felt these were "exceptional" people who displayed "exceptional" behavior -- i.e., having larger families. Wife's social origin was not associated with subsequent size of family either.[6]

---

[5] Three classes of origin were considered: Manual; Non-manual working class, and Non-manual middle class. Only teachers whose father's occupation had been manual were considered mobile.

[6] Size of family of procreation was also independent of size of family of orientation.

Though not statistically significant, type of additional education was consistently inversely related to fertility. Teachers who had attained additional degrees had fewer than the average children, while those with specialized certificates only had more than the average. Rather than being due to the mobility ethos, Scott felt this phenomena was due to an extrovert personality type among the certificate holders who with "keen and varied interests" may tend to have more children. Personality tests would be needed to test this hypothesis, however.

From his analysis Scott concludes:

> This lack of association is important insofar as it draws attention to the differential aspects of social mobility. Teachers achieve their mobility early and are apparently quickly formed into a homogeneous group, irrespective of social origin, with behavioral patterns and conventions of its own. The common standards of education presumably tend to iron out whatever social distinctions there were. (1958:261)

Obviously, these findings contradict those of Baltzell. One immediate question which comes to mind is whether the contradiction is due to the use of statistical tests or due to the choice of the non-mobile group.

Tien (1961) used a sample of 126 Australian university teachers to reexamine variations in fertility of individuals sharing the same SES but diverse mobility experiences. The respondents were divided into two marriage cohorts to control the effects of general economic circumstances.[7] Again there was no statistically significant difference in parity achieved by mobility status.[8] Tien concurred with Scott that:

---

[7] The first marriage cohort (1919-1939) experienced the depression whereas the second marriage cohort (1940-1947) enjoyed relative prosperity during the first ten years of their married life.

> The absence of marked differentiation in average family sizes...probably mirrors the acceptance of the prevalent ideology regarding the "ideal family size" and the assimilation of group standards and life style which presumably militate against excessive fertility within the academic circle. (Tien, 1961:257)

Tien did find support for the hypothesis that non-mobile couples display a shorter interval between marriage and first birth than mobile couples. He concluded that number of children born was not a sufficiently effective and sensitive measure of fertility, particularly as contraceptive usage minimizes parity variation. Children are not incompatible with social mobility throughout the married life, but may serve as a hindrance in the earliest years of married life. Postponement of parenthood allows the time and energy necessary for social mobility to be made available.

The final study in this section, conducted by Boggs (1957), used a sample of 123 men living in a predominantly upper middle class California suburb. Thus the mobility experiences and SES differ. Non-metropolitan background was added as an additional control.

Analysis of variance techniques showed no significant differences in fertility between mobile and non-mobile men[9] or men with metropolitan or non-metropolitan background.[10] Absolute differences showed that mobile men had more children than non-mobile men and men with a metropolitan background than those of a non-metropolitan background. Boggs speculated that the SMF Hypothesis would not be supported by a larger sample since:

---

[8] A teacher whose father was in a professional, semi-professional or high managerial occupation was considered non-mobile. Otherwise he was considered mobile.

[9] Respondents were considered mobile if their father held a job below the sales and clerical workers category on the Edwards scale and they held an occupation above or equal to the sales and clerical workers category.

> ...greater restriction of fertility may be seen as a consequence of individual social mobility under conditions which appear to demand greater sacrifices in return for higher status. Prosperity, higher education, and successful experience in adapting to the social mobility required by the urban occupational system all minimize the impact of social mobility, with the result that younger white-collar men from metropolitan backgrounds may no longer see children as inimical to advancement. (1957:213)

In summary, the SMF Hypothesis has generally failed to be supported by empirical studies in which the effect of upward mobility on fertility has been examined among more or less homogeneous groups.

Mobility and Fertility Among Heterogeneous Class Groupings. Berent (1952) employed a representative sample of the adult population of England and Wales who had been married for more than twenty years to examine the effects of inter- and intragenerational mobility on fertility. Status of destination was based on the occupation of the head of the household at the time of the interview.[11] Status of origin for intergenerational mobility was the occupation of the "head's" father; for intragenerational mobility, the occupation of the "head" at the time of marriage.[12] The major findings of Berent's work have been summarized as follows by Tien:

---

[10] Respondents were considered to have a non-metropolitan background if they spent most of their first 18 years in a place smaller than 100,000 in population that was 45 miles or more from a city of this size.

[11] Occupational categories were grouped into four social classes: Professional & Managerial; Inspectional, supervisory and other non-manual jobs; Combined skilled manual and routine grades of non-manual jobs; Semi-skilled and unskilled manual occupations.

> 1. Holding social origin constant, family size is inversely related to present social status.
> 2. Holding present social status constant, family size is also inversely related to social origin.
> 3. Holding social origin constant, those who have moved up have smaller families than those who remained static or who have moved down.
> 4. Holding present social status constant, those who have moved up, however, have larger families than those who remained static or who have moved down. (Tien, 1965:84-85)

Analysis of variance techniques had shown a significant variation in fertility due to the effect of present status and the effect of class of origin. From this Berent concluded two separate forces were influencing fertility. The first finding implies that persons of the same origin status "have to some extent acquired the fertility habits of the class into which they have moved" (Berent, 1952:248). The second finding implies that persons "presently" in the same social class "differ in their fertility because they have acquired and to some extent kept the family building habits of the class in which they were born" (Berent, 1952:247). This finding contradicts the results of Scott, Tien, and Boggs discussed in the previous section.

Berent then alternately held class of origin and class of destination constant and examined fertility by direction of movement (up, static, down). This allowed the separation of the effects of the two forces. He concluded, "...the differentiating effect of the present social class is slightly stronger than that of the class of origin. On the other hand, those socially promoted have higher fertility than the class into which they move" (Berent, 1952:250). If Scott and Tien are correct in their conclusion that common educational experiences diminish the effect of class of origin on fertility, then Berent's conclusions may not be as contradictory as they first seem.

---

[12] Only males were included in the analysis when intragenerational mobility was considered.

The Indianapolis Study of Social and Psychological Factors Affecting Fertility was not designed for the purpose of testing the utility of the SMF Hypothesis, yet several researchers have employed the data to examine the relationship of social mobility to fertility and fertility planning. This sample of 1444 "relatively fecund" couples was the first major American effort to obtain survey data pertaining to fertility.[13]

Kantner and Kiser (1954) used social mobility tables to compare fertility and intergenerational educational, as well as occupational, mobility in the Indianapolis Study. Since husbands and wives were both respondents, two measures of each mobility indicator were constructed. Occupational mobility was operationalized as a difference in occupational class of the husband and his father and also as a difference of the husband and the wife's father.[14] By comparing average fertility among status groups, the first three results of Berent were substantiated. However, Kantner and Kiser found that holding present status constant, those who had moved up had smaller families than those who remained static or moved down. This would seem to suggest that the effect of mobility on fertility is independent of direction. When controls were serially added for education of husband, couples' "net worth", age of wife, and extent of intragenerational mobility, the results were the same. There did seem to be significantly more occupationally mobile couples who were childless than non-mobile couples in the class of destination.[15]

---

[13] For a complete description of the design and sampling procedure of the Indianapolis Study see Whelpton and Kiser, 1946 (Vol. I).

Educational mobility is derived from a comparison of highest educational level attained by parents and offspring.[16] When either class of origin or class of destination is held constant fertility is inversely related to upward educational mobility. Downward educational mobility appears to be positively related to fertility, but the number of cases is so small that this trend must be considered tentative.[17] Again, controls for husband's occupation, couples' "net worth", age of wife and extent of intragenerational mobility did not change the results.

---

[14] A seven category occupational classification scheme was used: Professional & Semi-Professional; Proprietors; Managers and Officials, Clerical; Skilled; Semi-Skilled; Unskilled; and Farmers. Sons of farmers were treated as upwardly mobile only if they belonged to one of the top three classes.

[15] Couples whose upward mobility may have been facilitated by sterility are excluded from this "relatively fecund" group. Therefore these couples are voluntarily childless.

[16] Certain tabulations considered jointly the educational mobility of husband and wife rather than separately.

When the sample was restricted to "planned families", families where all children were planned, the results were similar. That is, mobile couples had smaller planned families than non-mobile couples of comparable socioeconomic status.

Riemer and Kiser (1954) used the Indianapolis data to examine the SMF Hypothesis among couples experiencing intragenerational mobility. It was expected that the results would be attenuated due to sample design (see footnotes 15 and 17). There was some slightly supportive evidence, but, in general, the data failed to confirm the hypothesis when either actual income changes or percentage income changes were used as measures of intragenerational mobility.

An examination of Table 4 shows that when a dichotomy of occupations was used to determine amount of intragenerational mobility,[18] the results were again the same as Berent's with one exception -- the last finding. Holding class of destination constant in the Indianapolis data, Riemer and Kiser found the upwardly mobile had larger families than those who remained static but smaller families than those who had been downwardly mobile. The same patterns were observed among "planned families," though the differences were smaller.

---

[17] Since the sample only included those with at least an eighth grade education, the range of SES is limited.

[18] The occupational categories were termed "Head" and "Hand", instead of the conventional "Non-manual" and "Manual" terminologies.

Table 5 presents the results of controlling for intergenerational mobility. Berent's first two findings are still substantiated. In addition, it would seem that downward mobility is positively related to fertility, except in the case where there is a temporary loss of position; upward mobility, particularly upward mobility before marriage, is inversely related to fertility.

When only "planned families" were considered, mobile couples had smaller families than couples in the class of origin (father's class) or class of destination (1940 occupation). This was true regardless of the direction of the movement and stage in the life cycle (before or after marriage). Couples who were temporarily in a class at the time of marriage, e.g., experienced both upward and downward mobility, had more children than non-mobile couples in their class of origin or destination.

Finally, a summary index of status, dichotomized as high or low, was introduced. The interpretations suggested from this analysis are presented by mobility group and SES in Table 6. Riemer and Kiser felt these interpretations should be used to modify the SMF Hypothesis. They explain:

> These interpretations suggest that although the upwardly mobile strive for fertility control, they do not strive for extreme fertility restriction. Very small planned families and childlessness are associated especially with those who may be judged to have a relatively disadvantaged position in the struggle for advancement or in maintaining their standard of

Table 4. Average Family Size as It Relates to Intragenerational Mobility in the Indianapolis Data.[a]

OCCUPATION AT MARRIAGE	OCCUPATION IN 1940	
	HEAD	HAND
HEAD	1.66 (558)	1.95 (87)
HAND	1.82 (170)	2.24 (625)

[a] Figures in parentheses are the sample sizes.

Source: Riemer and Kiser, 1954:199.

Table 5. Average Family Size as It Relates to Intragenerational Mobility with Controls for Intergenerational Mobility in the Indianapolis Data.[a]

OCCUPATION OF HUSBAND'S FATHER	OCCUPATION AT MARRIAGE	OCCUPATION IN 1940	
		HEAD	HAND
HEAD	HEAD	1.76 (268)	1.95 (20)
	HAND	1.69 (52)	1.97 (130)
HAND	HEAD	1.62 (253)	2.12 (58)
	HAND	1.82 (110)	2.31 (462)

[a] Figures in parentheses are the sample sizes.

Source: Riemer and Kiser, 1954:201.

Table 6. Summary of Suggested Interpretations for Groups Differentiated by Occupational Mobility and SES Level - Indianapolis Data.

Husband's 19'3 Occupational Level	SES Index	Occupation of Husband's Father			
		"Head"		"Hand"	
		Husband's First Occupation After Marriage			
		"Head	"Hand"	"Head"	"Hand"
"Head":	High SES	Nonmobile "Head" Workers (90 Per Cent) Controlled, Moderate Fertility	Upwardly Mobile: "Temporarily" in "Hand" Work at Marriage (94 Per Cent) High Aspiration for Status and Family Building; Exceptionally Capable of Successful Endeavor. Possibly Family a Spur to Achievement	Upwardly Mobile Before Marriage (80 Per Cent) Most Like Nonmobile "Head" Workers, Selection of Persons Willing and Able to Postpone Marriage and Childbearing, but With Aspirations Including Family Building under Favorable Economic Conditions	Upwardly Mobile After Marriage (50 Per Cent) Mobility by Own Efforts More Taxing than Mobility Before Marriage; More Highly Selective of Couples with Aspiration for Status Improvement Supported by Low Fertili
	Low SES	Nonmobile "Head" Workers (10 Per Cent) Highly Selected for Initial Failure in Fertility Control; May be Forced Marriages with Wives of Lower Status; Low SES Both Cause and Result of High Fertility	Upwardly Mobile: Temporarily in "Hand" Work at Marriage (Only 3 Cases)	Upwardly Mobile Before Marriage (20 Per Cent) Younger at Marriage, Selection of Those Less Capable of Economic Advance and Fertility Control; Strong Aspiration, but less Confidence and Ability, So Restrict Aspiration for Family Building; Probably Lower Initial Status	Upwardly Mobile After Marriage (50 Per Cent) Mobility of Lesser Degree Orientation More Toward Family Building Than Status Striving
"Hand":	High SES	Downwardly Mobile After Marriage (Very Few) Moderate Success in Fertility Planning After Late Marriage; Severe Fertility Restriction to Avoid Reduction in Standard of Living	Downwardly Mobile Before Marriage. Heterogeneous: (33 Per Cent) Some Remain Childless or Restrict Fertility As Much As Possible to Avoid Reduction of Living Standards. Some Not Interested in Status Striving or Compensate for Downward Mobility by Planning Relatively Large Families	Downwardly Mobile: Temporarily in "Head" Work at Marriage. (30 Per Cent, but Very Few) Successful Planners, Married Early, Planned Severe Fertility Restriction, but Those Who Failed in Control Have High Fertility	Nonmobile "Hand" Workers (25 Per Cent) Relatively Low Fertility Both Cause and Result of Relativel Good Economic Position
	Low SES	Downwardly Mobile After Marriage (Very Few) Early Marriage; Early and Continued Failure of Fertility Control	Downwardly Mobile Before Marriage (67 Per Cent) Few Successful Planners Married Late; Average Family Size Less Than Half the Size Wanted at Marriage; Age and/or Economic Diffculties Probably Responsible. Majority: Early Marriage and Failure to Control Fertility May Have Influenced Economic Status	Downwardly Mobile: "Temporarily" in "Head" Work at Marriage (70 Per Cent) Very Few Successful Planners, But Had Largest Average Size Planned Families and No Childlessness. Majority Like Nonmobile "Hand" Workers in Most Respects	Nonmobile "Hand" Workers (75 Per Cent) Low Planning Success, but Even Planned Fertility Among Highest in Sample No Evidence of Effective Status Striving

Source: Riemer and Kiser, 1954:230.

> living, whether their disadvantages derive from childhood background or from personal disabilities. Moderately large planned families and a low rate of childlessness appear to be associated with a relatively advantageous position in terms of childhood background and personal ability. There is no evidence that low fertility of the upwardly mobile is generally due to late marriage. Downwardly mobile couples seem to be selected for initial lack of fertility control. Included among the downwardly mobile, however, are not only couples of inferior abilities and victims of economic forces who are striving to maintain their previous standard of living, but some few couples who apparently plan large families without concern over their status. (Riemer and Kiser, 1954: 212)

Goldberg (1959) subset the Detroit Area Survey into rural-to-urban migrants and two-generation urbanites on the basis of husband's father's occupation in order to determine if the observed inverse relation of fertility to SES or to social mobility is a function of the "differential selectivity of occupational categories" of farm migrants.[19]

In the indigenous urban population, there were not significant differences in fertility by occupational or income category. However, when the rural-to-urban migrants sample was joined with that of the two-generation urbanites, there was a distinct inverse fertility pattern.[20]

Intergenerational mobility tables, employing a blue-collar, white-collar distinction, showed no statistically significant differences in fertility for two-generation urbanites as a whole, or by religious classification.[21] He points out that Yellin (1955) "studying a group of about 1,400 two-generation urbanites having white-collar occupations, find that the relationship between intergenerational occupational mobility and familism are non-existent" (Goldberg, 1959:219).

---

[19] This term refers to the fact that most farm migrants are employed in blue-collar occupations.

[20] Younger couples were excluded from both these sets under the assumption that "the relationship between status and fertility has been undergoing considerable change in the younger generations" (Goldberg, 1959:215).

A shifting of sex role differentiation in the two-generation urbanite family was given as a plausible explanation:

> The absence of differences in fertility by socioeconomic status among the two-generation urbanites may be hypothesized as resulting from the conflicting interests of husband and wife with respect to the shared decision concerning number of children desired -- status being directly related to desired family size for males, inversely related for females. (Goldberg, 1959:221)

Thus in an egalitarian family structure fertility would not be inversely related to measures of socioeconomic status.

In the traditional family structure, such as that of farm migrants, the wife is "virtually entirely" responsible for child care. In upwardly mobile migrant families, wives were more likely to participate in extra-familial roles than in non-mobile families. Furthermore, Goldberg points out that variation from the inverse pattern is usually in the higher socioeconomic levels and that adoption of a more egalitarian family structure usually occurs first in the native-born white, urban, white-collar classes.

---

[21] Catholic or Protestant.

Hutchinson (1961) used a sample from eight southern cities in Brazil to investigate the SMF Hypothesis on the basis of intergenerational mobility.[22] He found a consistent inverse relationship, even when controls for rural-to-urban migration, ethnic background or two generations of urban dwelling were used. Goldberg (1959) had posited that variation in fertility is not likely to be great by SES when the decision-making process for size of family is shared equally by both spouses. Hutchinson used this as a basis to explain his findings:

> The "traditional" roles of the sexes have been as yet little affected by social and economic change, and even in the largest cities and at the highest social levels the wife remains responsible for domestic matters and for child-rearing...she is by and large the arbiter of family size. As such she is the object of a number of forces tending to high fertility ... It follows that social class and social mobility are inversely related to fertility in Brazil because women are still comparatively free to modify the number of children they have in accordance with the claims that their other interests make upon them; and this is still true of the urban as of the rural born. (1961:187-188)

Some of these forces include the concept of machismo and the importance of it to her husband, the Church's influence, the lack of child labor laws, the family and kinship structure, the institution of compadresco, illiteracy, and preference for the rhythm method by the literate.

Blau and Duncan (1967) used the OCG data to perform several types of analyses to examine the SMF Hypothesis. Four measures of occupational status were obtained from some 6,000 couples:[23] husband's father's occupation; wife's father's occupation; husband's occupation at marriage; and husband's occupation in 1962.[24] Using social mobility tables of intragenerational mobility Blau and Duncan, "discerned 'occupational effects' [on fertility] not due to mobility by studying non-mobile couples" (1967:374). They then proposed the additive model (see page 12), "a model that may account for fertility variation among both mobile and non-mobile couples in such a way that there is no remainder to be attributed uniquely to the factor of mobility itself" (1967:374).

---

[22] There was no significant difference in fertility when father's occupation and father-in-law's occupation were used to determine class of origin. The fertility of class exogamous marriages was intermediate between the averages of the classes of origin of the spouses.

Using a mobile, non-mobile categorization of intragenerational mobility, Blau and Duncan found the variation of fertility means from those computed under the additive model was greater than could be explained by sampling error (1967:377). But since the mobility effect was small on the aggregate level, the researchers chose to accept the additive model.[25] The analysis was then repeated using the more detailed classification scheme and mobility types.[26] Again the additive model was accepted.

---

[23] This sample included both white and non-white persons.

[24] The occupations were classified into six categories: Higher white-collar; Lower white-collar; Higher manual; Lower manual; Farm; and Not specified.

[25] The following statement by Blalock was used as a rationale, "if a simple additive model predicts almost as well to a given dependent variable as does this more complex theory, the additive model is to be preferred" (Blalock, 1966:61).

In the one combination considered where mobility definitely preceded fertility, intergenerational mobility measured by wife's father's occupation and husband's first job, the additive model "fit", since the interaction sum of squares was insignificant. Therefore, the SMF Hypothesis was rejected. Both occupational classification schemes and both mobility classifications were used in the additive model to examine intergenerational mobility as measured by husband's father's and wife's father's occupation to 1962 occupation. Again, fertility variations appeared to be due to the combination of class effects rather than mobility effects.

In order to determine if the variations of the additive model from the observed means were systematically related to mobility, terms for direction and distance of movement were incorporated into the additive model.[27] This model was then applied to intragenerational and all three intergenerational mobility measures.

Examining the results, two points seemed obvious. First, "there is no general or pervasive effect of upward or downward mobility common to all kinds of occupational mobility and differing only by degree of mobility..." (1967:387). Only two types of occupational mobility showed significant effects for direction or distance of movement once the class effects were taken into account -- intragenerational mobility and intergenerational mobility as measured by husband's father's occupation and husband's 1962 occupation. Secondly, "if there is any substantial effect of mobility...it is confined to the extremes of long-distance upward or downward mobility"[28] (1967:387). Furthermore, extreme upward or downward mobility movement both had an equally depressing effect on fertility.

---

[26] The mobility types were: Non-mobile, nonfarm; Non-mobile, farm; Upward mobile, nonfarm; Downward mobile, nonfarm; Nonfarm to farm; Farm to nonfarm; Not classified.

[27] This model has been termed the interactive model (see page 13).

In a separate part of their study, Blau and Duncan had observed that fertility differentials differed significantly between rural-to-urban migrants and urbanites.

Combining these results with the assumption that mobility results in incomplete acculturation to either the class of origin or destination, the researchers concluded that the explanation lies within the Gesellschaft nature of urban life, and in particular, urban white-collar life:

> There is reason to think that the social life of white-collar workers is most extensively guided by Gesellschafts principles, and the more affluent higher strata among them have more children than the less affluent lower ones, as rational deliberation would dictate. Thus a major consequence of a Gesellschafts orientation, late marriage, as well as a major determinant of it, white-collar work, finds expression in rational planning of family size. Less extreme forms of the calculating orientation toward human relations, like those produced by urbanization,

---

[28] Long-distance upward mobility was defined as movement up 6 to 9 steps; long-distance downward mobility, -4 to -9 steps. A step was 10 points on the Duncan (1961) SEI scale.

> merely attenuate the usual class differences in fertility without reversing them. The usually observable class differential in birth rate results, according to the interpretation, from the less deliberate and more spontaneous orientation toward family life of the lower social strata. The slight depressing effect of mobility regardless of direction on fertility, finally, may be due to the disruptions in social relations often engendered by mobility, inasmuch as men removed from a matrix of established social ties are prone to become more calculating in social intercourse. (1967:417)

In summary, this section of research on the Behavioral-Behavioral dimension of the SMF Hypothesis has generally shown upward mobility has an attenuating effect on fertility. However, some evidence exists that this may be more valid for rural-to-urban migrants than for two-generation urbanites. The nature of the effect of downward mobility is not so clear.

Research Using Correlation and Regression Techniques. Most studies investigating the SMF Hypothesis have been largely concerned with Protestant samples. Brooks and Henry (1958) tested the hypothesis using a sample of Catholics and found a significant zero-order correlation of .049 between intergenerational occupational mobility and fertility.[29] When six control variables were added,[30] the partial correlation dropped to -.002, insignificant at the .05 level of probability.

In comparison to the class of origin or the class of destination, fertility averages for the upwardly mobile were generally higher, while downwardly mobile couples had slightly lower fertility rates.

---

[29] The Edward's scale was used to classify occupations.

[30] These included duration of marriage, wife's age at marriage, SES, community size, Catholic practice, and husband's ethnic status.

Brooks and Henry feel that their results do not reject the SMF Hypothesis since the aim of the hypothesis is to explain the existence of fertility differentials. And since, in this sample, the fertility differentials by SES exhibited a positive relationship, one would expect mobility effects on fertility to be positive. The researchers also contend that the exclusion of childless couples in the sample did not significantly bias the sample.[31] They concluded that since religious good standing in the community may be important in determining status for Catholics, one would not expect them to attempt to raise their social position by family-size limitation or child-spacing.

In 1960 Goldberg conducted a reanalysis of the Indianapolis data to determine if his results from the Detroit Area Survey could be obtained in other urban areas. In this study parents of both spouses were used to determine rural-to-urban migration. Table 7 reproduces the correlations of the six measures of SES and fertility for all "relatively fecund" couples by parents' occupations and for couples who planned both the number of children and the spacing of their children.

In contrast to the Detroit sample, Indianapolis farm migrants did not have a larger average family size than two-generation urbanites.[32]

---

[31] Each eligible couple had at least one child enrolled in a parochial school located in the northeastern U.S.

[32] Goldberg attributed this to the different sampling procedures.

Table 7. Correlations of Socioeconomic Variables with Live Births -- Indianapolis Study.

Socioeconomic Variables	All Couples			Number and Spacing Planned		
	FF[a]	FU[b]	UU[c]	FF	FU	UU
Average Earnings	-.343	-.156	-.049	+.117	+.228	+.340
Net Worth	-.310	-.145	-.021	-.018	+.192	+.245
Husband's Education	-.314	-.149	-.116	-.158	+.145	+.276
Wife's Education	-.375	-.218	-.143	-.133	-.004	+.151
Rent	-.437	-.345	-.196	-.075	-.071	+.262
Chapin Scale	-.505	-.372	-.256	-.115	-.036	+.202
Average Number of Children	1.85	2.07	2.02	1.20	1.10	1.11
$R_{1\cdot234567}$	.553	.406	.294	.381	.412	.385
Number of Cases	115	378	794	35	99	229

[a] Both parents from farm.

[b] One set of parents from farm, other urban.

[c] Both parents urban.

Source: Goldberg, 1960:27.

When both parents were from the farm, there was a strong inverse relationship, a fairly weak one for the two-generation urbanites, and an intermediate relationship when one parent was from each category. When only "number and spacing planned" families were included the relationship was slightly positive, but it strengthened when farm migrants and partial migrants were deleted.

Noting that the correlation between wife's education and number of children was always more negative than the corresponding correlation for husband's, Goldberg postulated the "obvious possibility that social status variables may not have the same effect on men and women with respect to family size preferences" (1960:30).

As in his earlier study, Goldberg concluded one reason for this differential strength in the relationship between SES and fertility was the strict separation of sex roles in migrant families. In addition, he advanced the idea that mobility is not as disruptive a force in the lives of urbanites as in rural migrants'. The latter have more to overcome because they start at a lower position and perceive fewer opportunities to advance. Therefore, they must sacrifice more to the mobility ethos, in particular, children (Goldberg, 1960:34-35).

Featherman (1970) used the model presented in Figure 4 with the Princeton three-wave longitudinal panel[33] to examine the intervening effects of fertility on the status attainment process. Occupational

---

[33] For a detailed description of the design of the Princeton Study at each wave see Westoff et al., 1961; Westoff et al., 1963; Bumpass and Westoff, 1970.

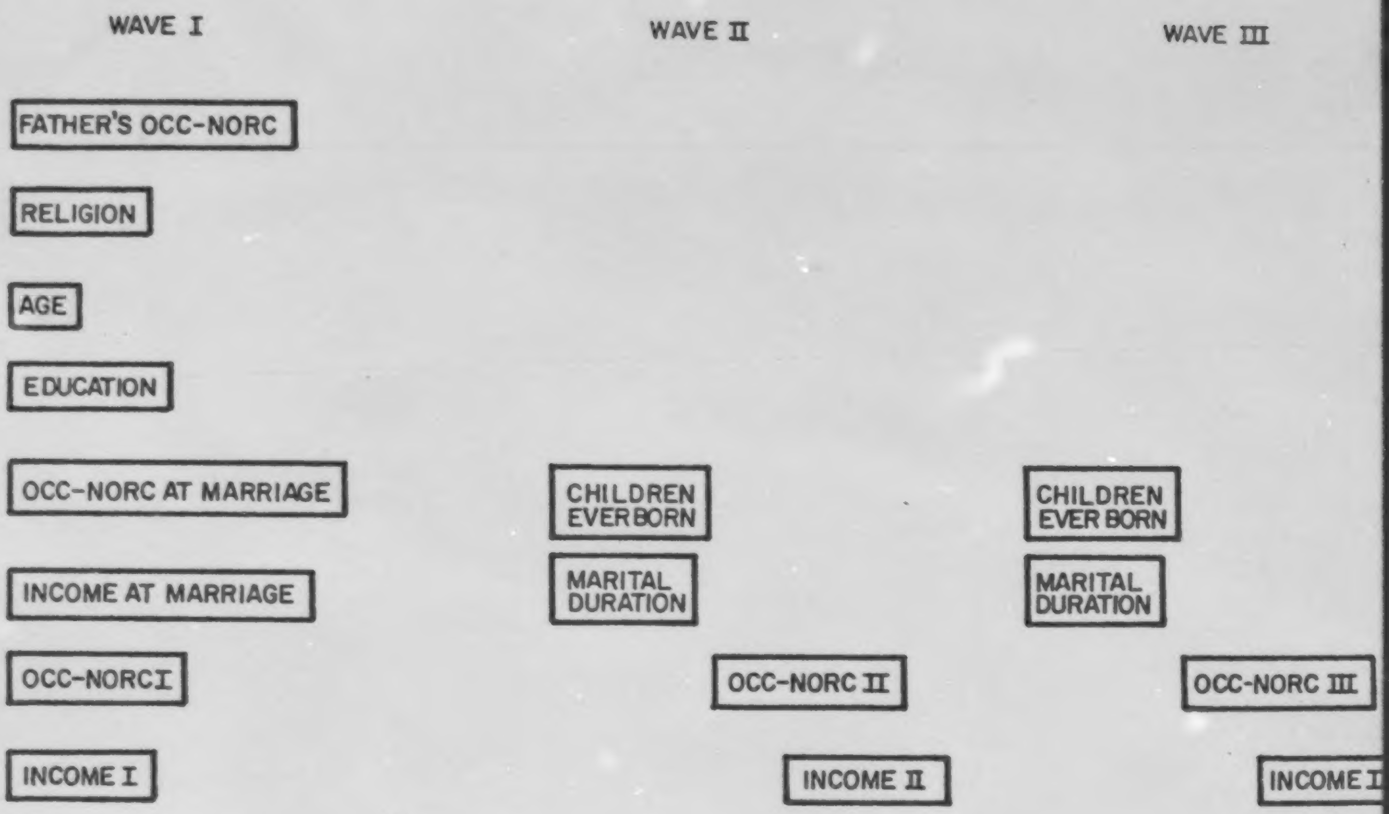


Figure 4. Featherman's conceptual model of cumulative fertility and marital duration as intervening variables in the process of socioeconomic achievement in the Princeton fertility study. (Source: Featherman, 1970:109)

status, measured in five point intervals on the NORC prestige scale, and economic status, measured in increments of income were regressed on fertility, operationalized as cumulative fertility and as additional live births between waves.[34] The purpose of the analysis was to determine "whether high fertility impeded the process of socioeconomic achievement, or conversely, whether low fertility aids social mobility, as suggested by the mobility hypothesis" (Featherman, 1970:111).

Featherman found that introducing fertility and marriage duration "neither add new sources of explained variation to the social structural model of socioeconomic achievement [at WAVE II]...nor function as intervening variables (capable of explaining how social background or education influence later achieved status..." (1970:119). However, cumulative fertility does have a small positive effect on socioeconomic achievement at Wave III, but this relationship should not be stressed due to the variation in time between Waves II and III. Featherman presumed that in a less restrictive population the effects would be greater, particularly in a population with greater variation in fertility[35] but concluded:

> From these data, we find little support for the line of reasoning that advances a net causal relationship between family size (antecedent) and socioeconomic advancement (consequence). Of course, the process whereby cumulative fertility influences the course of the

---

[34] Since the time interval between Waves II and III varied from three to seven years, additional live births was treated as a dummy variable.

[35] Having two children was one eligibility requirement.

> socioeconomic career might not be approximated by linear models, or it could operate differentially (in such a manner as to produce a nearly zero correlation) for selected sub-groups. (1970:125)

In an effort to test the latter possibility, wife's age was controlled while reexamining the relationship between cumulative fertility and SES achievement, both occupational and economic. Again there appeared to be no significant effect of fertility as an intervening variable.

Duncan et al. (1972) examined fertility as a career contingency variable which intervenes in the process of status achievement using the OCG data.[36] The causal model under consideration is presented in Figure 5.

For each variable, the zero-order correlation with fertility was negative. Examining the effects of wife's education, husband's education, husband's first job, husband's father's occupation, and wife's father's occupation, the researchers conclude, "...at least four of the background factors [the first four] relate negatively to cumulative fertility at any age in a reasonably consistent fashion, but only education, particularly that of the wife, has especially strong effects" (1972:239). The effects of wife's father's occupation on fertility were erratic.

Examining the net or direct effects in the model of fertility on status achievement, there appeared to be a negative effect on

---

[36] For a complete description of the OCG (Occupational Changes in a Generation) data, see Duncan et al. (1972:Chapter 2).

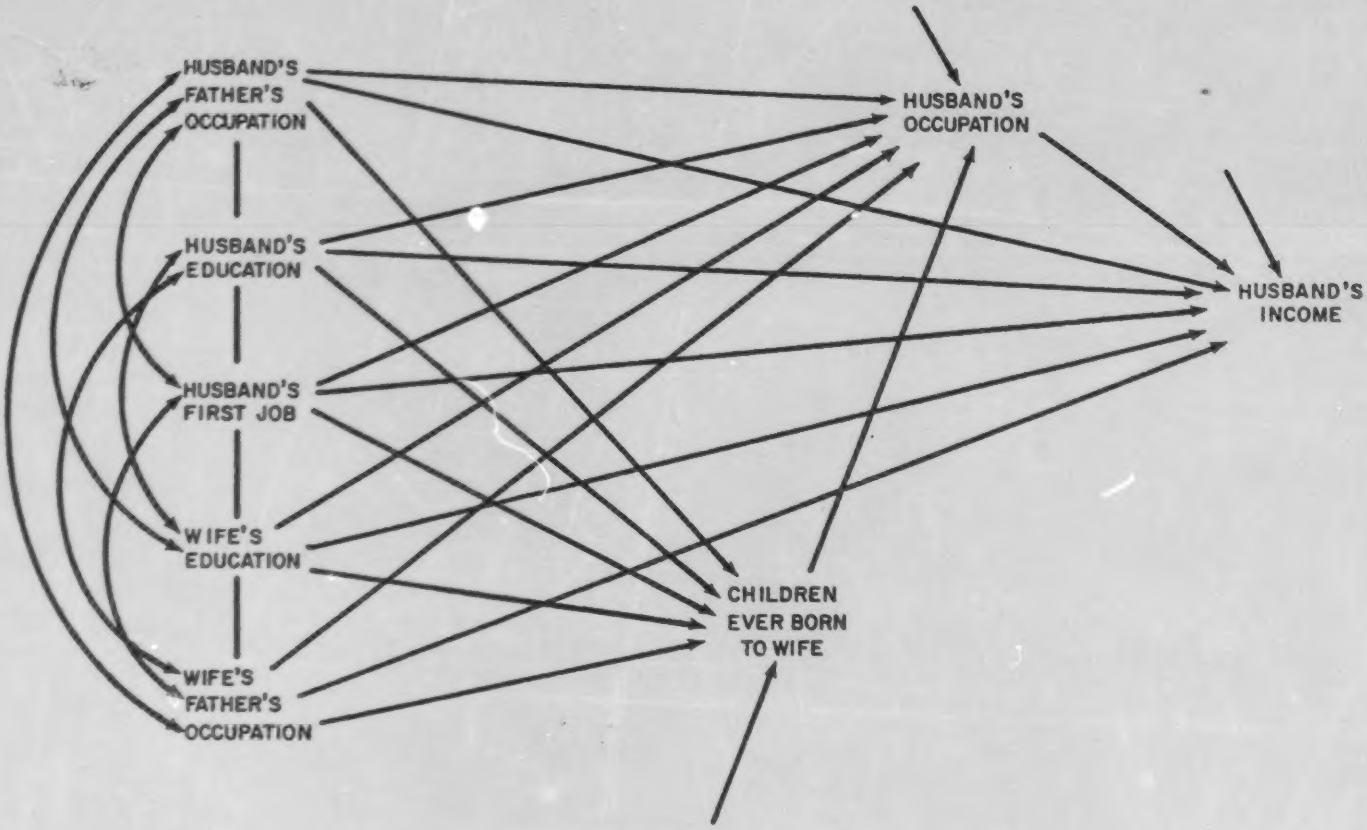


Figure 5. Duncan, Featherman, and Duncan's causal model interpreting fertility as a career contingency --- OCG data. (Source: Duncan, Featherman, and Duncan, 1972:237)

occupational achievement and a positive effect on income. However, both of these effects are slight. It would thus appear that the negative relationship apparent in the gross association between fertility and income is spurious; the background effects mask the direct positive effect (Duncan et al., 1972:243).

The following interpretation was given:

> ...a man with many children, if he proposes to support them, is highly motivated to seek and retain such employment as will yield the greatest total income among the alternatives that may be open to him. He is not in a favorable position to trade off some decrement to his earnings for a job with higher prestige or better working conditions, for example. Indeed he may find it expedient to hold more than one job simultaneously in view of the need for the additional income afforded by the second job. (1972:243)

In summary, this section of research on the Behavioral-Behavioral dimension of the SMF Hypothesis has shown that though there does seem to be a correlation between fertility and status of origin and status of destination, the nature of that correlation may vary in different populations. Furthermore, when "background effects" are statistically held constant, it appears that fertility has a slightly positive effect on subsequent economic achievement and a slightly negative effect on occupational achievement.

The Behavioral-Attitudinal Dimension

Marcum and Bean (1974) examined the relationship of intergenerational occupational mobility and fertility among Mexican American couples.[37] Following Duncan (1966), the additive model was used to first determine estimated fertility in the class of origin and destination. The interactive model was then used to determine unique mobility effects. Both models were then reanalyzed incorporating controls for wife's age at marriage, wife's education, and assimilation into the American culture[38] (Marcum and Bean, 1974:9).

Their findings suggest:

> ...mobile couples initially identify with higher statuses in order to assist in achieving a higher standard of living (up-mobiles) or to arrest its decline (down-mobiles). Since lower fertility is characteristic of the higher status levels which mobile couples emulate to facilitate their achievement of socioeconomic goals, the result is smaller families among the mobile. (Marcum and Bean, 1974:14)

They explain the fact that mobility effects were not apparent for second generation Mexican Americans in terms of perception of upward mobility. This grouping perceives a "bettering" of their life chances relative to their fathers', but "... the subtleties of status-related behaviors, such as fertility variations, are not always perceived" (1974:14). As the reference shifts from the Mexican to the American socioeconomic structure, objective as well as subjective mobility is perceived, and mobility effects on fertility become apparent.

---

[37] The data included 303 couples from the 1969 Austin, Texas Family Survey. All couples were married at least three years, had no children from previous marriages, and the males were younger than 50 and the women, younger than 35.

[38] Assimilation was operationalized as a dummy variable derived from an index measuring "language preference, residence patterns and ethnicity of friends: (Marcum and Bean, 1974:9).

The Attitudinal-Behavioral Dimension

Riemer and Kiser (1954), defining "economic tension" as the difference between actual level of living and desired standard of living, used the Indianapolis data to test the hypothesis that persons with high "economic tension" would have smaller planned families.[39] Both quantitative and qualitative measures of "economic tension" were obtained, but the reliability of the two measures was quite low (about .15).

Percentage difference between actual and desired income was directly related to fertility while "amount of additional income needed" was inversely related. From these results, Riemer and Kiser concluded there are probably two opposite forces at work:

> On the one hand, the desire for higher level of living may prompt family limitation. On the other hand, the couples with large families probably tend to need higher incomes and larger houses. To the extent that this is true, this latter factor would tend to bring a direct relation between size of family and percentage difference between actual and desired income, rental values, etc. It seems probable that this is the factor of chief importance in relationships of precisely this type among couples classified as "excess fertility" and in the total sample regardless of fertility-planning status. This factor should be of considerably less importance among planned families, but even among these it probably operates to some extent and may serve to wipe out or to override inherent relationships in the other direction, i.e., family limitation as a result of desire for higher level of living. (1954:188-189)

---

[39] Therefore only couples who had successfully planned their children were considered in this analysis.

Kiser and Whelpton (1951), attacking the problem from the opposite direction, used an index of "economic security" to test the SMF Hypothesis.[40] They found a direct relationship of "economic security" to size of planned family, even when SES was controlled. As in other studies using the Indianapolis data, deliberate childlessness appeared to significantly contribute to this relationship.

Featherman (1970), in his analysis of the Princeton data, constructed three indexes of achievement-related motivation from attitudinal responses toward work.[41] Correlational analysis failed to support the hypothesized inverse relationship between these indexes and additional inter-wave fertility.

Boggs (1957) used the Reissman scale of level of aspirations as an indicator of mobility attitudes to test the SMF Hypothesis.[42]

---

[40] Economic security was operationalized in three ways: the interviewer's rating of the economic security expressed by the couple; self-ratings of the couple on five multiple choice items; and a summary index of the previous two.

[41] A "Primary Work Orientation" index indicating a preference for the occupational role over recreation; a "Materialistic Orientation" index emphasizing material goods achieved through work as an instrumental activity; and a "Subjective Achievement Evaluation" measuring degree of satisfaction with previous educational, occupational and economic achievement.

[42] The Reissman scale asks, "How important would you feel the following considerations to be, if they were required in order to make a substantial advance:
1. Work out a new routine?
2. Take on more responsibility?
3. Lose contact with all of your present friends?
4. Leave your family for six months:
5. Move around the country a lot?
6. Move away from this community?"

High scores indicate low aspirations.

There was no significant difference in attained parity by level of aspiration, but Boggs felt the fact that the men with the larger families consistently had higher aspirations, even when residence background was controlled, deserved attention. The explanation offered was similar to that of Goldberg (1960) -- non-metropolitan white-collar workers must make the choice of either children or higher incomes whereas metropolitan men do not have to sacrifice as much to the mobility ethos.

The Attitudinal-Attitudinal Dimension

The dimension was given brief attention in the study by Riemer and Kiser (1954). They found no systematic relationship between fertility expectations and the "economic tension" index discussed previously.

A Critical Comment

In general, findings of empirical research testing the utility of the SMF Hypothesis are inconclusive and often contradictory. Furthermore, a strict comparison of the results is hampered by a variety of factors, such as (1) the various structural controls employed, whether through selective sampling or statistical methods, i.e., race, religion, parity, residence, social class; (2) the theoretical assumptions implicit in the differing methodologies; (3) the various measurements used for such critical variables as occupational grade, education, aspirations, and even fertility; (4) the spottiness of research in the conceptual dimensions other than the Behavioral-Behavioral dimension.

Specifically, research in the Attitudinal-Behavioral dimension has employed scaling devices which perhaps confuse or obliterate the intended attitudinal response. For instance, the Reissman scale of level of aspiration compounds attitudes of occupational mobility with geographical mobility attitudes. Riemer and Kiser initially felt their measurement of "economic tension" inferred motivation or aspiration for social mobility, but later decided it was an inadequate operationalization.

The following analysis attempted to overcome some of these problems -- particularly those of research in the Attitudinal-Behavioral dimension. An attempt was made to simulate, and enhance where possible, the measurements and techniques commonly employed in the more researched Behavioral-Behavioral dimension within the Attitudinal-Behavioral dimension.

CHAPTER III

DATA AND METHODS

The objective of this thesis was to empirically examine a version of the Attitudinal-Behavioral dimension of the SMF Hypothesis. The version under consideration posits that adolescent desires or aspirations for upward social mobility have negative effects upon subsequent early fertility. Racial and socioeconomic class comparisons were made to determine if the effects of social mobility orientations operated differentially on the early fertility of the white lower class versus the white middle class and of the white lower class versus the black lower class.

Data for testing the hypothesis in the three subgroups was obtained from the Southern Youth Study. Though the study was not designed specifically to test the SMF Hypothesis, several indicators of adolescent social mobility orientations were measured which were amenable to such a test and, in fact, were considered superior to the reported measures of mobility attitudes. The indicators used to test the Attitudinal-Behavioral dimension of the SMF Hypothesis were of two types. One type consisted of two indicators of mobility attitudes which were not anchored by social origins -- level of occupational aspirations for desired mate (LOAM) and level of occupational aspirations for self (LEA). The other type of indicators anchored LOAM and LEA by discrete measures of social origins; these constructed variables were termed intergenerational occupational mobility for future family (IGOM) and intergenerational educational mobility for self (IGEM).[1]

Level of occupational aspirations for desired mate (LOAM) and level of educational aspirations for self (LEA) were chosen as the basic measures of social mobility attitudes to test the SMF Hypothesis for two salient reasons. First, the review of the literature in the Behavioral-Behavioral dimension showed that occupational mobility of the family unit, generally measured in terms of the husband's occupation, and educational mobility of the individual were the two most frequently used measures to test the SMF Hypothesis. It was assumed for heuristic purposes that LOAM and LEA were the logical extensions of these behavioral measures to the attitudinal level. Therefore at the conceptual level, these indicators provide the basis for partial replication of studies in the Behavioral-Behavioral dimension within the Attitudinal-Behavioral dimension.

Secondly, since LOAM was measured for desired mate, the unit of analysis was considered the future family unit. The use of LEA allowed the inclusion of the individual as another unit of analysis. This was one of the few tests of the hypothesis that employed both of these units of analysis. Baltzell (1953) and Kantner and Kiser (1954) were the only two studies in the Behavioral-Behavioral dimension which employed both indicators; there were no studies found in the other dimensions which used both indicators.

---

[1] These four indicators are presented in more detail later in this chapter.

The analysis for this thesis was structured into five phases for both methodological and theoretical reasons. In the Behavioral-Behavioral dimension various statistical techniques were employed, not always with the same results. The contradictory results plausibly could have been due to the different techniques used for analysis or to the different populations used in the analysis. In this thesis, the techniques which were used either in the Attitudinal-Behavioral dimension or the Behavioral-Behavioral dimension were applied to the Southern Youth Study panel to test the SMF Hypothesis. Since in some phases of the analysis all of the panel was used while in other phases it was necessary to use segments of the panel, the dilemma of contradictory results was not definitively answered herein. However, some insight into the problem was gained.

This chapter discusses the Southern Youth Study, the indicators and measurements used in the analysis, and the rationale and a description of the procedures used in each phase of the analysis.

The Southern Youth Study

Source of Data

The Southern Youth Study was a combination of two cooperative regional projects of the USDA (CSRS) -- Research Project S-61 entitled "Development of Human Resource Potentials of Rural Youth in the South" and Research Project S-81 entitled "Development of Human Resource Potentials of Rural Youth in the South and Their Patterns of

Mobility."[2] The general objective of this study was to analyze, over time, the process and problems of achievement and attainment of adolescents in the non-metropolitan Deep South. Six southern states participated in the study -- Alabama, Georgia, Louisiana, Mississippi, South Carolina and Texas -- with the research in each state sponsored by its agricultural experiment station.

The S-61 Project was designed as a longitudinal two-wave regional research effort. However, only Alabama, Georgia, South Carolina and Texas participated in both waves[3]; Mississippi participated at Wave I only and Louisiana at Wave II only.[4]

With the exception of South Carolina, the target population at Wave I (1966) was high school sophomores[5] in a set of purposively selected non-metropolitan schools. These schools were selected on the basis of the socioeconomic characteristics of the counties in which the schools were located; each county included had been earmarked as "disadvantaged" in economic opportunity.[6] In South Carolina the Wave I (1967) population was obtained from a stratified random sample of all high schools within the state.[7] The basis of stratification was size of school and racial predominance.

---

[2] Jacobs (1973) provides a brief historical summary of the development of the S-61 Project. Cleland (1974) gives a general discussion of the historical background of these and previous southern regional research projects in the 1960's.

[3] Actually, the Alabama data at Wave I was collected as part of the interdisciplinary research project entitled "Development of Physical and Human Resources in Selected Areas of the Extreme Southern Appalachian Region" and the Wave II data as part of the S-61 Project (Cain, 1973). However, the research instruments used in Alabama at Wave I were essentially the same as those used in the states participating in the S-61 Project.

[4] Louisiana chose not to participate at Wave I because the S-61 Research Committee would not agree to obtain a probability sample.

[5] See Thomas (1970) for a justification of this age group choice.

As a result of these two sampling procedures and the close proximity of some of the counties to Appalachia, the environmental backgrounds of the Wave I respondents varied somewhat. However, Thomas (1970) and Level (1969) presented figures which show that all of the counties represented had a lower median family income per year than that for the United States in 1960.[8] In addition, the percent rural varied from 46 to 100 percent,[9] but the majority of the counties were over 70 percent rural. The percent black was higher than the 1960 percentage for the nation in all but eight counties,[10] with 16 of the 34 counties represented being more than 40 percent black.[11]

---

[6] The three East Texas counties were selected because they ranked high on the poverty index, were over 30 percent black and were not juxtaposed to a county containing an SMA. Mississippi ranked its counties on the basis of socioeconomic status (a weighted index of education, income and occupation), percentage change in population (1960-1963), and percent change in wages paid under the Mississippi Employment Security Commission (1960-1963) and then selected one high ranking and one low ranking county. (For more detail, see Van Landingham, 1970.) Geographically, one northern and one southern county were selected. The four Alabama counties were selected because of their proximity to Appalachia. (See footnote 3 in this chapter.) Georgia selected two southern counties and two northern counties which were also near the Appalachian region.

[7] Three "replacement" schools were used because the county superintendent of schools in one county would not grant permission for the research to be conducted in that county (Boyd, 1970).

[8] The following statistics were based on only 21 of the 24 South Carolina counties selected. Three counties were deleted from Thomas' (1970) and Lever's (1969) analysis because they contained SMSA's.

[9] All of the counties which were less than 50 percent rural were in South Carolina.

The addition of Louisiana to the project at Wave II (1968) expanded further the geographical scope of the S-61 population and because of the sampling procedure used, presumably its diversity.[12] In Louisiana a stratified, cluster sample of non-metropolitan high school seniors was obtained. The state was divided into four geographical areas, each relatively homogeneous in socioeconomic characteristics. Schools were then randomly selected from non-metropolitan parishes to obtain a sample proportionate by race to the number of students enrolled in non-metropolitan schools within the state.

---

[10] All four Alabama counties and two of the four counties in Georgia (those near Appalachia) were less than 11 percent black. The remaining two counties were in South Carolina (Lever, 1969). These were significant factors in not generalizing from the Southern Youth Study panel to non-metropolitan youth in the South -- the proportion of rural blacks in Alabama and Georgia was much higher than represented here and South Carolina included some youth who lived in counties classified as SMSA's.

[11] Thomas (1970) also presented comparative statistics by SES indicators on all counties but the six in South Carolina which had a median family income over $4000 or were over 50 percent urban. Briefly, those statistics showed that in comparison to the United States, the percent of families in each county with an income less than $3000 was higher, the percent of males employed as semi- or unskilled laborers was higher, and the median school years completed was lower. Ohlendorf (1967) discussed the major economic industries in each of the Texas counties. Cain (1973) compared the four Alabama counties to state statistics in 1960 and 1970 on residence, age, race, education, composition of the labor force, and income.

[12] The parish characteristics were fairly similar to those of counties in other states. The percent rural ranged from 66 to 100 percent, with 11 of the 13 parishes being over 70 percent rural. The percent black ranged from 15 to 65, with 6 of the parishes over 40 percent black. All but two parishes were above the national percentage in low income families. For more information on the characteristics of the selected counties and parishes, see Appendix B of the Texas Annual Report, 1974 to the S-81 Research Committee.

By recontacting in the S-81 Project a stratified random sample of those students who had participated in the S-61 Project, the research design of the Southern Youth Study became a six year (1966-1972) three-wave panel, at least in four of the six states. Since the respondents were no longer in high school at the time of the Wave III field work (Summer-Fall, 1972) and widely dispersed geographically, it was not practical in terms of finances or time to recontact all the respondents. Therefore, the S-81 Research Committee decided to reduce the size of the panel to 250 respondents per state. This was considered a panel size small enough to be feasible in terms of time and monetary cost, but when pooled together large enough for analyses which allowed controlling the four major groups of interest -- black and white males and females. The panel of 250 respondents from each state was stratified 50:50 by race and 60:40 by sex since the primary focus of the research was the status development of non-metropolitan males, with an emphasis on racial comparisons. The status development of women was considered secondary at the time and thus the ratio of females was disproportionately smaller.

Under this formulation, each state was to recontact 50 white and 50 black females and 75 white and 75 black males, randomly selected from those respondents who participated in both waves of the S-61

Project.[13] When pooled together this was to yield a data base of 1500 respondents in the Southern Youth Study. A subset of that projected data base, consisting of only the female respondents, was used for this thesis.

Collection of Data

At Wave I sophomores in the selected high schools were administered group questionnaires.[14] Only those students present in class the day of the interview participated; no effort was made to contact those students who were absent.[15] This method of obtaining participants yielded a total of approximately 7972 respondents.

The Wave II data was also collected via group administered questionnaires which were worded similarly to the previous interview schelude.[16] In those schools which participated at both waves, the seniors were matched with the sophomore respondents from Wave I.[17] The major portion of panel attrition between Waves I and II consisted of high school dropouts.[18]

---

[13] Since Mississippi and Louisiana participated in only one wave of the S-61 Project, their panels were selected from among the Wave I and Wave II samples, respectively.

[14] Two procedures were used in administering these group questionnaires. In some schools all high school sophomores were interviewed at once, while in others, the questionnaires were administered to, say, the sophomore English classes.

[15] In Noxubee County, Mississippi, school administrators would only allow one third of the black sophomores to be interviewed. In Bay Saint Louis High School, an all white school, a one third sample of the respondents was used. For further elaboration see Van Landingham, 1970.

In Wave III the data was collected primarily by personal interviews, though mailed questionnaires and telephone interviews were used to contact a portion due to the geographical dispersion of many of the respondents.[19] Tne questionnaire was designed such that the attitudinal responses concerning aspirations and expectations on a variety of issues were to be completed by the respondent as the interviewer read the questions and, when applicable, the structured responses. This comprised approximately one half of the questionnaire. The latter half was completed by the interviewer as the respondent verbally answered the questions posed pertaining to status attainment.[20]

---

[16] There was some variation by state and wave in the questionnaires administered. This variation took three forms: deletion of regional research instruments; rewording of regional research instruments; and additions, usually at the end of the questionnaire, to the regional research instruments. The questionnaires used in the Southern Youth Study are presented by state for each wave in the unpublished document entitled "Research Instruments: Questionnaires used in the Southern Youth Study." Requests for this document should be sent to S-81 Project Leader, Agricultural Economics and Rural Sociology, Texas A&M University, College Station, Texas, 77843.

[17] In Alabama only 59 percent of the females (60% of the white and 49% of the black) participated at both waves. The percentage was 66 for South Carolina (68% of the white and 60% of the black) and 86 for Georgia (77% of the white and 96% of the black). Texas was the only state which followed up on respondents who were not present in class as seniors the day of the Wave II interview. As a result, 91 percent participated in both waves in Texas.

[18] Texas and South Carolina were the only states where information exists concerning the number of high school dropouts versus the number who had moved but were still in high school in 1968. However, since the panel was considered one of high school graduates, the high school dropout rate is of less importance than if it were considered a panel of a specific age group.

[19] There was some cooperative effort between participating states in administering personal interviews to respondents who migrated out of the state of origin, but within the region. In Texas, mailed questionnaires were used primarily for respondents who were, or whose husband's were, in active military service out of the state.

The projected 1500 male and female respondents had to be adjusted since the attrition rates in some states between Waves I and II were such that there were insufficient numbers to fill the race-sex quotas; 1228 were actually recontacted at Wave III. Of these, 528 of the adjusted projection of 580 females were recontacted. As shown in Table 8 the number and percentage of females recontacted at Wave III varied by state and race.

In Mississippi less than fifty percent of the quota of black females were recontacted. This was partially due to the fact that only 53 black females originally participated in the S-61 Project. Thus few valid replacements existed. In addition, Mississippi did not participate at Wave II, and the decision to participate at Wave III was made rather late. Therefore, the field work was handicapped by dated locator information.

---

[20] In a few mailed questionnaires in Texas this resulted in missing data on the status attainment questions since the instructions written on the questionnaire indicated the schelude should be returned to the interviewer.

Table 8. Number and Percentage of Adjusted Quota of Females Recontacted at Wave III by State and Race

	Whites		Blacks	
	N	%	N	%
Alabama	50	100	24[a]	83
Georgia	45	90	44	88
Louisiana	50	100	50	100
Mississippi	48	96	24	48
South Carolina	49	98	44	88
Texas	50	100	50	100

[a] Alabama reported 23 of the 29 black females were recontacted at Wave III. The additional female reported her race as white in 1968, but the interviewer who conducted the 1972 interview by phone reported the respondent's race as black, and the latter was the information coded.

Indicators and Measurements

As mentioned previously, the Southern Youth Study was not designed specifically to test the SMF Hypothesis. However, it was felt that a portion of the responses contained in the original questionnaires were amenable to such a test and, in fact, were superior to the reported measures of mobility orientations. The questions that were used as indicators of race, social origins, mobility attitudes for the desired mate (future family) and self, and early fertility behavior, as well as those for the structural characteristics are available on request.[21] The primary variables and their operationalization are discussed in this section. Frequency tables for each of the questions and the composite variables are presented in Appendix A.

Social Origins

Two indicators of social origin were included in this analysis -- the occupation of the breadwinner in the family of orientation and the educational level of the mother. The breadwinner's occupation was considered an indicator of the general socioeconomic standing of the family of orientation which served as a status placement function for the female respondent. The mother's educational level was considered a base line for comparison of mobility orientations for self, even though the literature justifying such a position is rather scarce.[22]

---

[21] Request the document entitled "Research Instruments: Questionnaires Used in the Southern Youth Study." Requests should be sent to S-81 Project Leader, Agricultural Economics and Rural Sociology, Texas A&M University, College Station, Texas 77843.

Breadwinner's Occupation (BRSEI). The occupations given as open-ended responses to the question:

> What is the major job held by the main breadwinner (money earner) of your home?

were assigned Duncan's (1961) socioeconomic index scores. In order to circumvent the "no response" and uncodeable responses, i.e., social security, retirement, etc., computed means of occupational scores for each educational level of the breadwinner were computed for blacks and whites.[23]

Educational Level of Mother (ELM). In Wave I and Wave II the respondents were asked:

> What is the highest school grade completed by your mother?

In both waves the responses were structured into an eight level ranking from "Did not go to School" to "College graduate."[24] The Wave II

---

[22] The only study which examined the SMF Hypothesis using female's intergenerational educational mobility, Riemer and Kiser (1954), operationalized educational origins as the average of father's and mother's education. And then, the female's educational level was often combined with the husband's in the tabulations.

[23] These means were computed only when the breadwinner was the father or the mother. Seemingly, it was not justifiable to insert these or other means when the breadwinner was someone other than a parent since the problem under consideration was intergenerational mobility (children vis-a-vis parent(s)).

[24] "Don't know" was also a structured response offered (coded 9) but this response has been grouped with the missing data for this analysis.

(1968) responses were taken as an indicator of origin status for these female respondents and were reclassified into less discrete categories for the purpose of the various analytical frameworks herein.[25]

Mobility Orientations for Desired Mate.

A review of the literature showed that the mobility of women has frequently been examined through the occupation of her husband. McCrory (1974) explained that this procedure reflects her mobility within the family structure. In order to examine the mobility attitudes for the future family of the adolescent females in the Southern Youth Study panel, a composite variable, level of occupational aspiration for desired mate (LOAM), was constructed from responses of occupational aspirations for desired mate (OAM) and occupational expectations for desired mate (OXM).

Haller et al., do not dispute the quantitative and qualitative differences between aspirations and expectations as presented by researchers such as Kuvlesky and Bealer (1966), but do feel that realistic and idealistic aspirations are "weakly defined" and "highly correlated" and "are overwhelmingly saturated with general LOA [level of occupational aspirations for self]" (1974:119). For this reason realistic and idealistic aspirations are of interest as contributors to LOA, not as separate variables. Furthermore, they assert that the inclusion of both realistic and idealistic aspirations increase the reliability of LOA, qualified by the fact that LOA appeared to be slightly less reliable for females than males (Haller et al., 1974: 119).[26]

---

[25] The rationale for using Wave II rather than Wave I data was that as the respondents aged, their knowledge of their mother's educational attainment would tend to be more accurate. Of the 331 who responded in Waves I and II, 70 or 21 percent, gave different responses at Wave I and Wave II for mother's education. The majority of the variance was characterized by (1) a "don't know" or "no response" at one time period and a response, usually in one of the categories below "graduated from high school" (2) a one rank move of reported levels in Wave I and Wave II.

Occupational Aspiration for Mate (OAM). This variable was operationalized by assigning Duncan (1961) socioeconomic scores to responses obtained in Waves I and II to the question:

> If the man you marry could have any job he wanted, what job would you most desire him to have as a lifetime kind of work?

Occupational Expectations for Mate (OXM). Again, Duncan's socioeconomic scores were assigned to the responses obtained in Waves I and II to the question:

> What kind of job do you really expect the man you will marry or your husband to hold most of his life?

Level of Occupational Aspiration for Mate (LOAM). This composite variable was operationalized by computing the unweighted average of

---

[26] It was felt these remarks about LOA, though not strictly related to LOAM, were pertinent in view of the general lack of rigorous attention extant on LOAM.

OAM and OXM for both Wave I and II.[27]

$$LOAM = \frac{OAM(SEI) + OXM(SEI)}{2}$$

Mobility Orientations for Self

The respondent's mobility orientations for self were operationalized by a composite variable, level of educational aspirations (LEA) (McCrory, 1974). Level of educational aspirations was constructed from structured responses of educational aspirations (EA) and educational expectations (EX) in the same manner as LOAM.

Educational Aspirations (EA). This variable was operationalized by responses to the following question:

> If you could have as much education as you desired, which of the following would you do?

Six fixed choice responses were offered in Waves I and II ranging form "Quit school now" to "Complete additional studies after graduation from a college or university." Numerical values, ranging from one to five, were assigned to each response.[28]

---

[27] In those cases where responses were given for OAM but not OXM in a particular wave, OAM was considered the best estimate of LOAM, and vice versa when a response was given for OXM but not OAM. Among the whites, OAM66 was used as the best estimate 34 times; OXM66, 5 times; OAM68, 23 times; and OXM, 11 times. Among the blacks, OAM66 was used as the best estimate 12 times; OXM66, 3 times; OAM68, 25 times; and OXM68 only once.

[28] Because the panel consists of high school graduates and the infrequency of responses to the first response, the category "Quit school now" was combined with the responses to "Graduate from high school."

Educational Expectations (EX). In Waves I and II this variable was measured by fixed choice responses to the following question:

What do you really expect to do about your education?

The fixed choice responses and numerical value assignments were the same as those for educational aspirations.

Level of Educational Aspiration (LEA). This composite variable was operationalized by computing the unweighted average of EA and EX for both Wave I and II.[29]

$$LEA = \frac{EA + EX}{2}$$

Intergenerational Mobility Measures

Previous research on the Attitudinal-Behavioral dimension of the SMF Hypothesis employed attitude scales to measure mobility attitudes. Yet research on the Behavioral-Behavioral dimension usually attempted to anchor mobility in social origins. Two measures of intergenerational mobility were constructed from the attitudes given toward occupation of desired mate and education for self, anchored by the social origins of the respondent. It was felt such an operationalization circumvented some of the problems of the attitude scales reported and concomitantly more closely replicated research in the Behavioral-Behavioral dimension. Furthermore, direction and distance of movement is inherent in the value constructed.

---

[29] In those cases where responses were given for EA but not EX in a particular wave, EA was considered the best estimate of LEA, and vice versa when a response was given for EX but not EA. Among the white females, EX66 and EX68 were used as the best estimates twice and once, respectively. Among the blacks EA66 was considered the best estimate twice; EX66, 6 times; EA68 and EX68 once each.

Intergenerational Occupational Mobility (IGOM). This variable was constructed by taking the difference in SEI scores of level of occupational aspiration for desired mate (LOAM) and breadwinner's occupation (BRSEI) at Waves I and II.[30]

$$IGOM = LOAM - BRSEI$$

Positive values of IGOM indicate upward mobility attitudinal responses, while negative values indicate downward mobility orientations. The resultant numerical values indicate distance of movement desired for the future family from the family of orientation.

Intergenerational Educational Mobility (IGEM). The difference between level of educational aspiration for self (LEA) and educational level of mother (ELM) was constructed as the measure IGEM.

$$IGEM = LEA - ELM$$

Again the sign of the computed value indicates direction of movement and the numerical value indicates distance of movement.[31]

---

[30] A recent article by Tyree and Treas (1974) refers to intergenerational mobility behavior of females through husband's occupation as "marital mobility."

[31] The eight level ranking of ELM was collapsed into five categories: Less than High School; High School Graduate; High School plus Vocational Training; Some College; College Graduates. LEA rank levels were: Graduate from High School; High School plus Vocational Training; Graduate from a Junior College; Graduate from College; College plus Additional Training. Therefore an IGEM score approximates a mobility measure of one degree.

Early Fertility Behavior[32]

The respondent's early fertility behavior was measured in the following manner from Wave III data:

(1) If the respondent was married, she was asked, "How many children do you have?"

(2) If the respondent replied to the above question, the number of children reported was coded.

(3) If the respondent did not reply to the above question and was not married or divorced, then the number of children was coded as zero.[33]

Socioeconomic Class[34]

Kiser and Whelpton (1953 postulated the existence of class specific attitudes and psychological characteristics concerning the

---

[32] The term "early fertility behavior" is used since all respondents were approximately 21 years old and therefore in the early part of their childbearing years.

[33] In Texas all respondents were asked "How many children do you have?", regardless of marital status and the number of never married females with children was insignificant. Of the 292 white females in the Southern Youth Study, 80 (29%) were considered never married females with no children. Of the 236 black females, 110 (47%) were considered never married females with no children; 14 (6%) of the never married black females reported children, not all of whom were from Texas. Additionally, 30 (13%) of the married black females reported no children.

[34] This term is used herein, as in other empirical research on the SMF Hypothesis, as synonymous with socioeconomic groupings. Though the conceptual distinctions between class and grouping are recognized, it was felt the research in this area was not refined sufficiently to warrant a more discrete distinction.

"value" of children. Contraceptive behavior is known to vary by class. For these reasons, socioeconomic class comparisons were made for each model in this thesis.

The breadwinner's socioeconomic index (BRSEI) was used to operationalize socioeconomic class in the following manner:

(1) If BRSEI was 45 or less, the respondent was considered a member of the lower socioeconomic class.

(2) If BRSEI was greater than 45, the respondent was considered a member of the middle socioeconomic class.[35]

Over 90% of the black females and over 60% of the white females were located in the lower socioeconomic class. Because the number of black females located in the middle class was extremely small (15) those with a SEI score greater than 45 were excluded from the analysis. Therefore comparisons were made between white lower class females, white middle class females, and black lower class females.[36]

In order to determine if the responses varied significantly by state residence, chi-square tests of significance were computed for each of the indicators included in the following analysis by state. Within each of the race-class groupings, contingency tables were constructed for each indicator. Each of the mobility attitude indicators were collapsed into low, medium and high categories. "No information" categories were deleted from the contingency tables to avoid empty cells. Following Lever (1969) the .01 level of probability was used to determine significance. As shown in Table A26, there were no significant differences in responses by state. This preliminary analysis was taken into account in making the decision to pool the separate states' panels into one regional panel.

---

[35] Haller et al. (1974) also used this score as the cut-off point between the lower and middle classes. Despite cognizance of the fact that class distinctions may differ between blacks and whites and rural and urban residents, the constant criterion of the above researchers was used for heuristic purposes.

[36] Because only one socioeconomic grouping of black females was under consideration in the analysis, this group was also referred to as "black females" or "blacks".

Structural Characteristics of the Panel

Scanzoni states that in comparison to urbanites, "Being born in the South (especially the rural South) is a handicap to occupational achievement for both white and black, but particularly for blacks" (1971:32). Reasons for this "handicap" include lower initial economic and status placement due to the generally depressed economic and educational levels of the parents in the family of orientation. In addition, familial characteristics such as family structure and size of family of orientation often hamper the struggle for achievement. Lastly, family religion is an important factor in status achievement, particularly for blacks.

In addition to affecting status achievement, each of these structural characteristics has been presented in the literature as a correlate of fertility.

Non-Metropolitan Origins

The Southern Youth Study panel has been characterized as nonmetropolitan since most of the respondents attended high schools located in areas of less than 100,000 in population at Wave I, and the percent rural, in most of the counties, was greater than 40 percent.[37] However, racial and class differences in perception of residence were conspicuous in the panel.[38] The percentage of white middle class females residing "in a city (over 2500)" was twice that of white lower class and black lower class females. On the other hand, both white lower class and black lower class females resided "in the country, on a farm" three times as often as middle class females. In addition, blacks were also more numerous in the "in the country, not on a farm" category.

Status Placement

All the respondents in this panel have been characterized as disadvantaged youth, but relatively speaking, the black females were even more disadvantaged with respect to their initial status placement. While 62 percent of the breadwinners in white families held jobs scored in the lower class, over 85 percent of the 215 black breadwinner's jobs scored in the lower class.[39] Furthermore, 69 percent of the black, as compared to 43 percent of the white, breadwinners in the lower class held occupations scored below 16.

---

[37] Scanzoni uses this population level (100,000) to demarcate rural and urban. However, the term rural has been reserved in this thesis to refer to areas with a population of less than 2500.

[38] It should be emphasized that the following discussion is concerned with perceived residence rather than actual residence. Nonetheless, to facilitate the following discussion the qualifier, perceived, was dropped.

When education level of respondent's father was examined, race and class differences were again obvious. The percentage of white middle class fathers with less than a high school education was half that of white lower class fathers and almost a third of black lower class fathers in this category. The percent of fathers having educational training beyond high school showed class and racial differences. The percentages were 13, 50 and 5 for the white lower class, white middle class, and blacks, respectively.

Family Structure

Socialization theory posits that fertility norms are first learned within the family. These internalized norms are then expected to influence size of family of procreation. However, empirical research has not always borne this out (Scott, 1958). A shifting of primary groups, with different characteristic values, and a resultant norm modification is one explanation offered for the lack of a direct relationship (Westoff and Potvin, 1967). Whether the family structure is "intact" or "non-intact" is hypothesized to influence the effectiveness of norm internalization and status placement.[40]

---

[39] Of the 15 black breadwinners above the lower class, the majority were preachers and teachers.

In this panel the family structure of black and white females is markedly different. White lower class (70%) and white middle class (77%) females overwhelmingly grew up in families whose size was within the American norm of two to four children. In contrast, 78 percent of the black females had four or more siblings. White middle class females most often come from intact families (92%), while only 73 percent of the black females were from intact families.[41] The percentage for the white lower class was 87.

Religion

Over 85 percent of the white females and 95 percent of the blacks were Protestants. The Catholics were equally represented among the lower and middle classes for whites, and on the basis of Westoff and Bumpass' (1973) findings that contraceptive behavior among young Catholic couples approximates that of non-Catholics, it was assumed this small percentage introduced little bias in the panel.[42]

---

[40] Non-intact is defined here as families in which the mother and father are not married and/or not living together, whether due to divorce, separation, or death.

[41] In addition, 8% of white breadwinners as compared to 35% of the black breadwinners were someone other than the father.

[42] It could be argued however that Catholic fertility ideals differ from Protestant (Gustavus, 1968), and therefore despite family planning practices, completed family size of Catholics would be larger. Nonetheless, the concern of this thesis is with early fertility behavior, rather than completed family size.

Rationale and Description of Analytical Procedures

Phase I

Studies attempting to test the Attitudinal-Behavioral dimension of the SMF Hypothesis have rather consistently used indirect indicators of mobility orientations, i.e., "economic tension", "economic security", "primary work orientation", "materialistic orientation", "subjective achievement evaluation", and the Reissman scale. None of these indexes directly examined educational or occupational mobility attitudes; the research orientation has been primarily concerned with attitudes toward income as indicators of mobility orientations. Therefore, the use of level of educational aspirations for self (LEA) and level of occupational aspirations for desired mate (LOAM) in Phase I adds to the state of knowledge at the conceptual level.

It should also be noted that Phase I was considered a direct test of the SMF Hypothesis only because the socioeconomic class comparisons were made, thereby controlling to some extent social origins, and not because the measures inherently were amenable to a direct test. Previous studies in the Attitudinal-Behavioral dimension were generally not direct tests because the indicators of social mobility attitudes were not anchored by any measure of social origins. Thus, the previous research in the Attitudinal-Behavioral dimension was similar to the early descriptive efforts in the static approach to differential fertility. Scott, reflecting on the research in the static approach, stated, "any theory built purely on the extent of social mobility irrespective of the point of origin is not therefore very useful" (1958:253). Therefore, Phase I was considered an improvement over the previous research in the Attitudinal-Behavioral dimension.

In terms of methodology, three procedures have been previously used to examine the hypothesis in the Attitudinal-Behavioral dimension: to compare the fertility rates by index items (Riemer and Kiser, 1954; Kiser and Whelpton, 1951); to examine the frequency within social mobility categories by parity level using analysis of variance techniques (Boggs, 1957); to examine the correlation coefficient between the index categories and fertility (Featherman, 1970).

In Phase I of this analysis, contingency tables were constructed by dichotomizing fertility as "no children" and "some children" and by classifying social mobility attitudes into low, medium and high categories. Fertility was dichotomized in this manner because of the skewed distribution of fertility toward the lower parities (See Table A20 in Appendix A). This dichotomized variable was referred to as "parity" herein in order to distinguish between fertility as an interval level variable and parity as an ordinal level variable. Chi squares were then computed to determine if there were significant differences in "parity" by classification of social mobility attitudes. A probability level less than or equal to .05 was considered significant.

Thus, Phase I was comparable, though not identical, to extant empirical analyses in the Attitudinal-Behavioral dimension in procedural techniques and employed more direct measures of social mobility attitudes than previous reports and provided some control of social origins. In addition, the results of Phase I served as a basis of comparison to results of some subsequent phases which attempted to refine further the test of the SMF Hypothesis.

Phase II

Phase II used the traditional method of analysis employed in the Behavioral-Behavioral dimension, social mobility tables, to test the Attitudinal-Behavioral dimension of the SMF Hypothesis. The indicators of social mobility attitudes that were used in Phase I were also used in Phase II, but the analysis was refined somewhat by cross-classifying these attitude categories with social origin indicators. The mean fertility was then computed for each resulting cell, where possible and where the number of respondents in that cell was large enough to assure some degree of reliability. Respondents were considered non-mobility oriented if their level of aspiration was equal to their status of origin.[43] Likewise, the respondents were considered mobility oriented if their level of aspiration was higher (or lower) than their status of origin.

There were several drawbacks resulting from this procedure. First, the characteristics of the population in the Southern Youth

---

[43] The concept of equality, when broad classifications are used, is obviously ambiguous, but unfortunately will continue to be used in social mobility table analyses.

Study, combined with the low frequency of respondents desiring downward mobility (and in the case of blacks, of respondents educationally non-mobility oriented), resulted in many cells where the mean fertility could not be computed with accuracy. Secondly, since no statistical test of significance was used, the analysis based on actual differences in Phase II could not be compared meaningfully with the results of Phase I. Lastly, the distance of movement desired was obscured by the use of such broad classifications of social origins.

Phase III

Phase III was conducted to combine the more easily analyzed method of Phase I with the concept of intergenerational mobility inherent in Phase II. In order to accomplish this task, intergenerational mobility measures, constructed by anchoring the social mobility attitudes of Phase I with discrete measures of social origins, were analyzed using bivariate contingency tables. Fertility was again dichotomized as "no children" or "some children", and the intergenerational mobility measures IGOM and IGEM were classified into low, medium and high categories. The chi square was computed for each indicator by social class and race to determine if there were significant differences in "parity" by classification of intergenerational social mobility attitudes. A probility level less than or equal to .05 was considered significant.

The findings of Phase III were then compared with the findings of Phase I, and to the extent possible, with those of Phase II.

Phase IV

A primary purpose of Phase IV was to provide a link between the bivariate analyses of previous phases and the path analytic techniques of Phase V. The correlation analysis of Phase IV contributed to this linkage by accomplishing three salient tasks. First, it examined the bivariate relationships between intergenerational mobility attitudes and actual early fertility behavior, using these indicators as interval rather than as ordinal variables. Secondly, it examined the magnitude and direction of these relationships, therefore allowing for a stronger test of the SMF Hypothesis. Lastly, the correlations computed between the Wave I and Wave II indicators of intergenerational mobility attitudes permitted an examination of the interrelatedness of these measures (IGOM and IGEM).

The regression analysis of Phase IV, by using only those respondents for whom data was available on the three indicators in each model (see Table 9), was able to examine the partial betas for both Wave I measures of IGOM and IGEM on fertility and for both Wave II measures on fertility in a multivariate context and to incorporate an analysis of the stability of IGOM and IGEM separately. Phase V, by including only those respondents for whom data was available on all five indicators,[44] was able to both analyze the stability of IGOM and

---

[44] These five indicators included IGOM66, IGEM66, IGOM68, IGEM68 and early fertility behavior.

Table 9. Outline of Analytical Phases

Phase	Type of Analysis	Model
I	Bivariate Contingency Tables	Parity[a] * LEA Parity * LOAM
II	Social Mobility Tables	Mean Fertility of ELM * LEA Mean Fertility of Class * LOAM
III	Bivariate Contingency Tables	Parity * IGEM Parity * IGOM
IV	Correlation and Regression	Fertility = IGEM66 + IGOM66 Fertility = IGEM68 + IGOM68 IGEM68 = IGEM66 + IGOM66 IGOM68 = IGEM66 + IGOM66
V	System of Path Coefficients	Fertility = IGEM68 + IGOM68 IGEM68 = IGEM66 + IGOM66 IGOM68 = IGEM66 + IGOM66

[a] Parity is defined here either as "no children" or as "some children".

IGEM and to estimate the effect of that stability on fertility. Therefore, the regression analysis of Phase IV was also a link to Phase V.

The SMF Hypothesis was considered supported if there was a significant, negative correlation (beta) between the intergenerational mobility attitudes and early fertility behavior.

Phase V

In Phase IV it was not possible to accurately determine the relative effect of IGOM and IGEM on fertility within each class and racial subgroup since the number of respondents varied in each bivariate and multivariate computation. Therefore, Phase V recomputed the correlations using a constant number of respondents within each subgroup. A recursive causal model was constructed using the measures of IGOM and IGEM and fertility in order "to break down [the] empirically observed correlations into parts that are due to different processes" (Heise, 1969:42).

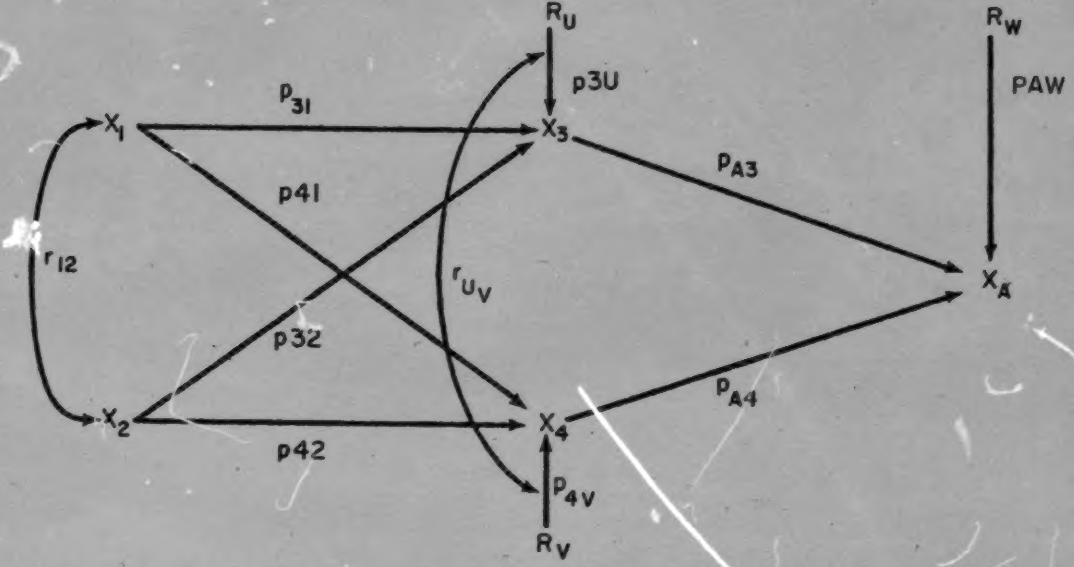
Because of the research design of the Southern Youth Study, it was felt the most complete test of the SMF Hypothesis could be made by using an adaptation and extension of the path analytic method developed by Heise (1970) for use with panel data. Heise's model was designed for a two-wave, two-variable panel design and allowed for consistency (stability) and cross-lagged effects. The basic Heise model was extended by including a third variable measured at Wave III (fertility) and the corresponding estimates of the direct effects. Similar extensions have been made by Cosby and Ohlendorf (1973).

As in Heise's approach, a variable measured in two different waves was considered to be two hypothetically different variables. The result was a five variable model as depicted in Figure 6. Again following Heise, the assumption of temporal asymmetry of effects was made. Additionally, it was assumed that effects do not occur instantaneously but rather after some finite period of time. These two assumptions imply that a variable measured at time t can not affect a variable measured at time t-k, where k=0,1,2, ..., t-1.

In the resulting model as presented in Figure 6, the path from X1 to X3 was an estimate of the stability of IGOM, and the path from X2 to X4 was an estimate of the stability of IGEM. The paths from X1 to X4 and X2 to X3 were estimates of the cross-lagged effects of IGOM66 on IGEM68 and IGEM66 on IGOM68, respectively. These interpretations of the path coefficients agree with the Heise model (1970) and work done by Pelz and Andrews (1970) on cross-lagged correlations.

The extension of the basic Heise model provided for two additional direct effect paths: X3 → XA, X4 → XA. Again the assumption of temporal asymmetry of effects eliminated effects in the reverse direction.

When these assumptions were included, the resulting model consisted of the following paths within the system: P_{A3}, P_{A4}, P_{31}, P_{32}, P_{41}, P_{42}, as indicated in Figure 6. Such a notation allowed the paths to be easily separated into two groups for explanatory purposes.



X_1=IGOM66 X_2=IGEM66 X_3=IGOM68 X_4=IGEM68 X_A=FERT72

Figure 6. Extension of Heise's path model used in Phase V.

Paths containing the index A correspond to a test of the SMF Hypothesis. Paths without an A index correspond to the analysis of the stability of IGOM and IGEM and the multivariate interrelationship of these variables.

In Figure 6 the curved lines such as those connecting X1 to X2 and RU to RV denote that these are exogenous variables, whereas the arrows show paths of direct effects with the head of the arrow pointing to an endogenous variable. The variables U, V, and W represent the combination of variables outside the system which contribute to the unexplained variance of X3, X4, and XA, respectively. Therefore the paths p_{3U}, p_{4V}, and p_{AW} represent the effects of the variables U, V, and W on X3, X4 and A respectively.

Both intra- and inter-model comparisons were made. The intramodel analysis compared the standardized path coefficients to determine the relative effect of these indicators with more accuracy than had been gained in the previous phase. The path model under consideration was the same for each subgroup, but to facilitate discussion, the model for the white lower class was referred to as Model I; for the white middle class, Model II; and for the black lower class, Model III.

In addition to explaining the relative importance of the different processes affecting fertility within each subgroup, another primary purpose of this analysis was to make subgroup comparisons of these effects. To make these comparisons "meaningful" it was necessary to compare the actual unstandardized path coefficients, or as they are sometimes termed, path regression coefficients (Schoenberg, 1970). If two path regression coefficients were equal (or approximately equal) then it was said that portion of the process affecting fertility operated similarly for both subgroups. Alternatively, if the coefficients were different for the two subgroups, it was concluded that that portion of the process operated differently for the two subgroups. A path was considered significant if it was twice its standard error. However, since the number of respondents differed in each subgroup, it was possible that a coefficient in one subgroup be statistically significant while a larger coefficient in the other subgroup not be statistically significant. In these inter-model comparisons it was considered more important that two corresponding coefficients approximate one another rather than that one was, and one was not, statistically significant. This emphasis on substantive significance, rather than statistical significance is particularly pertinent in the models considered herein since the standard error and therefore significance of the path, is a function of the sample size; the sample sizes in the path models were small, varing from 71 in the white lower class to 45 in the white middle class to 108 in the black lower class.

CHAPTER IV

ANALYSIS

The analysis was structured into five phases. Phase I examined the bivariate relationship between social mobility orientations and parity using contingency tables. Phase II examined the bivariate relationships between social mobility orientations by class of origin and early fertility behavior using social mobility tables. Phase III utilized contingency tables to test the bivariate relationship of intergenerational social mobility orientation measures and parity. Phase IV analyzed, within a multivariate context, the strength of the relationships between intergenerational social mobility orientation measures and fertility behavior through correlation and regression analyses. Finally, Phase V examined the relationships between intergenerational social mobility orientation measures and fertility behavior within a causal framework using path analytic techniques.

Phase I: Contingency Tables Relating Social Mobility Attitudes and Parity

Two measures of level of aspirations were used to examine the bivariate relationship between social mobility attitudes and parity -- level of educational aspirations for self (LEA) and level of occupational aspirations for desired mate (LOAM).

Level of Educational Aspirations and Parity

Contingency tables, with computed chi-squares, relating categorical measures of LEA to parity for each race-class grouping have been presented as Table 10.[1] In the white lower class there was a consistent significant relationship in the predicted direction between LEA and parity. The significant relationship held for measures of LEA obtained at both the Wave I and Wave II interviews. It was interesting to note the actual fertility experienced between lower class women who aspired to only a high school education and those who aspired to at least a college degree. Only 19 percent of the high aspirants at Wave II (1968 high school seniors) had children by Wave III (1972) as compared to a substantially greater 65 percent of those who had aspired to a high school degree. Similar results were obtained in the Wave I (high school sophomores) comparisons.

Similar patterns in percentage distributions were obtained for the white middle class but the differences were not of sufficient magnitude to be judged significant by chi-square. Although not statistically significant, in every case for the white middle class women, the percentage with children decreased with each successive increase in level of educational aspirations.

The relationship between LEA and parity was not significant for the black lower class women as tested by chi-square. The pattern of

---

[1] LEA measures were collapsed to the following categories: Less than or equal to high school; Vocational training or some college; and College degree or more.

Table 10. Bivariate Relationship Between Parity and Level of Educational Aspirations (LEA).

White Lower Class

	LEA66 ≤ High School	LEA66 Vocational Training or Some College	LEA66 ≥ College	LEA68 ≤ High School	LEA68 Vocational Training or Some College	LEA68 ≥ College
No Children	.47 (9)	.49 (43)	.78 (32)	.35 (6)	.58 (53)	.81 (33)
Some Children	.53 (10)	.51 (45)	.22 (9)	.65 (11)	.42 (39)	.19 (8)

LEA66: N = 148 d.f. = 2 X^2 = 10.49 Pr = .01

LEA68: N = 150 d.f. = 2 X^2 = 11.74 Pr = .01

White Middle Class

	LEA66 ≤ High School	LEA66 Vocational Training or Some College	LEA66 ≥ College	LEA68 ≤ High School	LEA68 Vocational Training or Some College	LEA68 ≥ College
No Children	.55 (6)	.59 (22)	.73 (29)	.33 (1)	.61 (21)	.77 (36)
Some Children	.45 (5)	.41 (15)	.27 (11)	.67 (2)	.39 (15)	.23 (11)

LEA66: N = 88 d.f. = 2 X^2 = 2.01 Pr = .378

LEA68: N = 86 d.f. = 2 X^2 = 4.74 Pr = .095

Black Lower Class

	LEA66 ≤ High School	LEA66 Vocational Training or Some College	LEA66 ≥ College	LEA68 ≤ High School	LEA68 Vocational Training or Some College	LEA68 ≥ College
No Children	.45 (5)	.56 (58)	.68 (34)	.64 (7)	.58 (58)	.73 (51)
Some Children	.55 (6)	.44 (45)	.32 (16)	.36 (4)	.42 (42)	.27 (19)

LEA66: N = 164 d.f. = 2 X^2 = 2.82 Pr = .249

LEA68: N = 181 d.f. = 2 X^2 = 3.95 Pr = .147

percentages for this group were less consistent than that observed in the white middle or lower classes. The same regular decrease in parity by increasing LEA category occurred at Wave I. However, by Wave II the pattern was inconsistent in that women who aspired to vocational training or some college had a higher percentage than the low and high aspirants.

Level of Occupational Aspirations for Desired Mate and Parity

Contingency tables relating categorical measures of LOAM to parity and the computed chi-squares have been presented in Table 11 for each race-class grouping.[2] Among the white lower class women, there was a significant relationship in the predicted direction for Wave II measures of LOAM, but not for the Wave I measures. A pattern of percentage distributions was observed in the white lower class for LOAM68 that was similar to the one observed for LEA. That is, only 20 percent of the senior females who wanted the future family to be in the upper class had children at Wave III as compared to 52 percent who wanted to remain in the lower class. This pattern was not observed when Wave I indicators of LOAM were used.

In the white middle class there was a significant relationship in the predicted direction for Wave I measures of LOAM, but not for the Wave II measures. It was interesting that this was the reverse of the findings for the white lower class. The pattern of the

---

[2] LOAM measures were collapsed to the following categories: Lower class (less than or equal to 45); Middle class (greater than 45 but less than 90); and Upper class (greater than or equal to 90).

Table 11. Bivariate Relationship Between Parity and Level of Occupation Aspiration of Mate (LOAM).

White Lower Class

	LOAM66			LOAM68		
	Lower Class	Middle Class	Upper Class	Lower Class	Middle Class	Upper Class
No Children	.53 (18)	.52 (30)	.58 (11)	.48 (24)	.69 (52)	.80 (8)
Some Children	.47 (16)	.48 (28)	.42 (8)	.52 (26)	.31 (23)	.20 (2)
	N = 111 d.f. = 2	X^2 = .22	Pr = .896	N = 135 d.f. = 2	X^2 = 7.26	Pr = .029

White Middle Class

	LOAM66			LOAM68		
	Lower Class	Middle Class	Upper Class	Lower Class	Middle Class	Upper Class
No Children	.44 (8)	.69 (25)	.86 (12)	.71 (5)	.64 (37)	.75 (12)
Some Children	.56 (10)	.31 (11)	.14 (2)	.29 (2)	.36 (21)	.25 (4)
	N = 68 d.f. = 2	X^2 = 6.36	Pr = .044	N = 81 d.f. = 2	X^2 = .79	Pr = .677

Black Lower Class

	LOAM66			LOAM68		
	Lower Class	Middle Class	Upper Class	Lower Class	Middle Class	Upper Class
No Children	.49 (20)	.61 (41)	.61 (17)	.54 (20)	.67 (6[illegible])	.52 (12)
Some Children	.51 (21)	.39 (26)	.39 (11)	.46 (17)	.33 (34)	.48 (11)
	N = 136 d.f. = 2	X^2 = 1.77	Pr = .425	N = 163 d.f. = 2	X^2 = 3.02	Pr = .225

percentages for women who had children at Wave III was likewise reversed by wave. The predicted pattern of a decreasing percentage of females with children as level of occupational aspirations for desired mate increased was observed for Wave I indicators, but not for Wave II indicators.

There were no statistically significant differences, as measured by chi-square, between LOAM and parity among the black lower class women at either wave. Though not statistically significant, there was a difference in the percentage of women who had children at Wave III and desired to be non-mobile at Wave I and those who desired to be mobile. Whereas 51 percent of the black women who desired to remain in the lower class had children at Wave III, only 39 percent of the women who aspired to be mobile into the middle class and 39 percent of those aspiring for the upper class had children at Wave III. Neither this pattern nor the predicted pattern was observed when Wave II indicators were used.

Summary of Phase I

In general, the SMF Hypothesis was supported in the white lower class when level of educational aspirations and level of occupational aspirations for mate were used as indicators of social mobility attitudes. LOAM66 was the exception. There was some support for the hypothesis in the white middle class when LEA was used since the predicted patterns were obtained in every case, but were not of sufficient magnitude to make them statistically significant. In addition, the hypothesis was supported for the white middle class when the Wave I indicators of LOAM were used to test the hypothesis. The hypothesis was not supported for either indicator in the black lower class. A summary of the findings of Phase I has been presented in Table 12.

Phase II: Social Mobility Tables

Two indicators of social mobility attitudes -- level of educational aspirations for self (LEA) and level of occupational aspirations for desired mate (LOAM) -- were cross-classified with two indicators of social origins -- educational level of mother (ELM) and class of origin (determined by BRSEI), respectively. The mean fertility of the non-mobility oriented (situated on the diagonal) was compared to the mean fertility of the mobility oriented (located off the diagonal). Because of the social origin characteristics of the panel (see Tables A2 and A3 in Appendix A), it was not possible in all cases to compare the mean fertility of the mobility oriented with that of the class of origin and class of destination. However, the data was considered supportive of the SMF Hypothesis if the mean fertility of the upward mobility oriented was less than the mean fertility in the status of origin.[3]

---

[3] Since there exists two theoretical positions of the effects of downward mobility on fertility, the mean fertility of the downward mobility oriented was presented, when it existed, but no statements concerning the supportiveness of the data were made.

Table 12. Summary of Phase I Test of the SMF Hypothesis

Social Mobility Indicator	Social Class	Hypothesis Supported
LEA66	White Lower Class	Yes
	White Middle Class	No
	Black Lower Class	No
LEA68	White Lower Class	Yes
	White Middle Class	No
	Black Lower Class	No
LOAM66	White Lower Class	No
	White Middle Class	Yes
	Black Lower Class	No
LOAM68	White Lower Class	Yes
	White Middle Class	No
	Black Lower Class	No

Level of Educational Aspirations by Educational Level of Mother

Generally, the SMF Hypothesis was supported for whites when educational mobility attitudes were examined at Wave I and at Wave II. See Table 13 to compare the mean fertility levels by LEA and ELM at Wave I and II. The exception occurred at Wave I where the respondents' level of aspiration was a college degree or more and their mothers had vocational training or some college; the mean fertility in that cell (.37) was greater than that of the class of origin (.31).

It was impossible to evaluate the hypothesis for blacks, since there was an insufficient number of respondents with a non-mobility orientation to determine the mean fertility in the educational status of origin. As pointed out previously, since the educational level of the black mothers was concentrated in the "less than or equal to high school" category, it was also not possible to determine the mean fertility of the non-mobility oriented in the class of destination for blacks. There was a difference in mean fertility of .15 between those blacks having a medium LEA and a high LEA at Wave I and a .20 difference at Wave II.

Level of Occupational Aspirations for Desired Mate by Class of Origin

Comparing the mean fertility of the upward mobility oriented to the mean fertility in the class of origin, class differences were apparent for whites at Wave I. That is, at Wave I the data supported the SMF Hypothesis in the white middle class but not in the white

Table 13. Social Mobility Tables Comparing Mean Fertility by the Educational Level of Mother (ELM) and the Level of Educational Aspiration (LEA).

White Females

ELM	LEA66			LEA68		
	<High School	Vocational Training or Some College	≥College	<High School	Vocational Training or Some College	≥College
<High School	.74 (27)	.64 (105)	.35 (51)	.86 (14)	.47 (110)	.29 (63)
Vocational Training or Some College	*	.31 (13)	.37 (19)	*	.40 (10)	.22 (14)
≥College	*	*	.19 (16)	*	*	.23 (17)

Black Females

ELM	LEA66			LEA68		
	<High School	Vocational Training or Some College	≥College	<High School	Vocational Training or Some College	≥College
<High School	*	.64 (94)	.45 (39)	*	.59 (81)	.39 (59)
Vocational Training or Some College	*	*	*	*	*	*
>College	*	*	*	*	*	*

* Mean fertility was not calculated if the n was less than 9.

lower class. In fact, the mean fertility increased in the white lower class as mobility orientations increased. See Table 14 for the exact fertility means by LOAM66 and LOAM68 and by class of origin. At Wave II the hypothesis was supported by both classes.

At Wave I and Wave II there were racial differences in that the hypothesis was supported for the black lower class, but more so for those whose level of aspirations was the middle class than for those whose level of aspirations was the upper class. This pattern did not exist among white respondents.

Summary of Phase II

In general, the SMF Hypothesis received greater support within the white lower origin status than within the white middle origin status when educational aspirations were used as an indicator (see summary Table 15). On the other hand, support of the hypothesis was more stable in the white middle class of origin than in the white lower class when occupational aspirations for desired mate was used as an indicator of mobility orientations. It was not possible to compare educational mobility attitudes to status of origin for blacks, but when occupational mobility orientations were compared to the class of origin, the hypothesis was considered supported, but the effect on fertility was concentrated in short distance movement.

Since contingency tables and social mobility tables are not directly comparable, a strict comparison of findings from Phase I and Phase II was not possible. In addition, cells of the social mobility

Table 14. Social Mobility Tables Comparing Mean Fertility by the Class of Origin and the Level of Occupational Aspiration for Desired Mate (LOAM).

White Females

	LOAM66			LOAM68		
Class of Origin	Lower Class	Middle Class	Upper Class	Lower Class	Middle Class	Upper Class
Lower Class	.50 (34)	.67 (58)	.79 (19)	.66 (50)	.33 (75)	.20 (10)
Middle Class	.78 (18)	.42 (36)	.14 (14)	*	.45 (58)	.31 (16)

Black Females

	LOAM66			LOAM 68		
Class of Origin	Lower Class	Middle Class	Upper Class	Lower Class	Middle Class	Upper Class
Lower Class	.73 (41)	.59 (67)	.71 (28)	.70 (37)	.48 (103)	.61 (23)

* Mean fertility was not claculated if the n was less than 9.

Table 15. Summary of Phase II Test of the SMF Hypothesis

Whites

Social Origins	LEA66		LEA68	
	Medium	High	Medium	High
Low	Yes	Yes	Yes	Yes
Medium	--	No	--	Yes

Blacks

	Medium	High	Medium	High
Low	N/A	N/A	N/A	N/A

Whites

Social Origins	LOAM66		LOAM68	
	Medium	High	Medium	High
Low	No	No	No	Yes
Medium	--	Yes	--	Yes

Blacks

	Medium	High	Medium	High
Low	Yes	Yes	Yes	Yes

tables for LEA were not strictly comparable to the class divisions in Phase I since social origin was determined by educational level of mother; see Table A3 in Appendix A for the distribution of ELM by social class. Yet, the findings of Phase I and Phase II were similar.

Phase III: Contingency Tables Relating Intergenerational Mobility Attitudes and Parity

In Phase III two measures of intergenerational mobility attitudes were alternately compared to parity -- intergenerational educational mobility for self (IGEM) and intergenerational occupational mobility for desired mate (IGOM).

Intergenerational Educational Mobility and Parity

As presented in Table 16, there were no significant differences as tested by chi-square between Wave I or Wave II categorical measures of IGEM and parity within any of the race-class groupings.[3] Although not significant, the percentage of women in the white lower class who had children at Wave III decreased with each successive increase in IGEM. This predicted pattern was more prominent at Wave II (seniors) than at Wave I (sophomores).

In the white middle class, not only were there no significant

---

[3] Intergenerational educational mobility was collapsed into the following categories: Less than or equal to one step; Greater than one step but less than four steps; Four steps or more. One step was roughly equivalent to one degree.

113

Table 16. Bivariate Relationship Between Parity and Intergenerational Educational Mobility (IGE

White Lower Class

	IGEM66			IGEM68		
	≤ 1	2-3	4-5	≤ 1	2-3	4-5
No Children	.49 (20)	.61 (51)	.62 (10)	.57 (26)	.61 (44)	.86 (18)
Some Children	.51 (21)	.39 (32)	.38 (6)	.43 (20)	.39 (28)	.14 (4)

N = 140 d.f. = 3 X^2 = 1.97 Pr = .386

N = 140 d.f. = 2 X^2 = 4.27 Pr = .124

White Middle Class

	IGEM66			IGEM68		
	≤ 1	2-3	4-5	≤ 1	2-3	4-5
No Children	.71 (30)	.61 (19)	.57 (8)	.65 (20)	.66 (23)	.78 (14)
Some Children	.29 (12)	.39 (12)	.43 (6)	.35 (11)	.34 (12)	.22 (4)

N = 87 d.f. = 2 X^2 = 1.33 Pr = .517

N = 84 d.f. = 2 X^2 = 1.04 Pr = .603

Black Lower Class

	IGEM66			IGEM68		
	≤ 1	2-3	4-5	≤ 1	2-3	4-5
No Children	.40 (10)	.61 (49)	.66 (33)	.59 (16)	.59 (45)	.70 (44)
Some Children	.60 (15)	.39 (31)	.34 (17)	.41 (11)	.41 (31)	.30 (19)

N = 155 d.f. = 2 X^2 = 4.92 Pr = .089

N = 166 d.f. = 2 X^2 = 1.9 Pr = .399

differences, the percentages were distributed in patterns inconsistent with the hypothesis. For instance, the percentage of white middle class women with children increased slightly rather than decreased with each successive increase of IGEM at Wave I.

The predicted pattern was also observed among black lower class females when Wave I indicators were used, but again were not of sufficient magnitude to be significant. When Wave II indicators were examined, a smaller percentage of high aspirants had children than low or medium aspirants, but the difference was small.

Intergenerational Occupational Mobility for Desired Mate and Parity

The contingency tables and computed chi-squares relating categorical measures of IGOM and parity for each race-class grouping have been presented as Table 17.[4] There were no statistically significant relationships within any of the race-class groupings when either Wave I or Wave II measures of IGOM were used.

In addition, the distribution of percentages for the white lower class was inconsistent with the SMF Hypothesis when Wave I indicators were used in that the percentage of females having children was higher for those aspiring to the middle class than for the non-mobility oriented or for those aspiring to the upper class. However, when Wave

---

[4] Intergenerational occupational mobility for desired mate (IGOM) was collapsed into the following three categories for Phase III: Less than or equal to thirty points on the Duncan SEI scale; Greater than thirty and less than or equal to sixty points; Greater than sixty points but less than ninety points.

Table 17. Bivariate Relationship Between Parity and Intergenerational Occupational Mobility (IGOM).

	IGOM66			IGOM68		
White Lower Class						
	≤ 30	≤ 60	≤ 90	≤ 30	≤ 60	≤ 90
No Children	.54 (23)	.46 (21)	.68 (15)	.53 (30)	.66 (35)	.77 (20)
Some Children	.46 (20)	.54 (25)	.32 (7)	.47 (27)	.34 (18)	.23 (6)
	N = 11 d.f. = 2 X^2 = 3.04 Pr = .222			N = 136 d.f. = 2 X^2 = 4.96 Pr = .087		
White Middle Class						
	≤ 30	≤ 60	≤ 90	≤ 30	≤ 60	≤ 90
No Children	.61 (35)	.90 (10)		.68 (44)	.63 (10)	
Some Children	.39 (22)	.10 (1)		.32 (21)	.37 (6)	
	N = 68 d.f. = 2 X^2 = 3.59 Pr = .173			N = 81 d.f. = 2 X^2 = .16 Pr = .924		
Black Lower Class						
	≤ 30	≤ 60	≤ 90	≤ 30	≤ 60	≤ 90
No Children	.49 (18)	.56 (27)	.65 (33)	.53 (19)	.63 (45)	.67 (37)
Some Children	.51 (19)	.44 (21)	.35 (18)	.47 (17)	.37 (27)	.33 (18)
	N = 136 d.f. = 2 X^2 = 2.3 Pr = .321			N = 163 d.f. = 2 X^2 = 1.96 Pr = .388		

II measures were used, the pattern of percentages predicted by the hypothesis was observed, but was not significant.

In the white middle class, the predicted pattern of percentages was observed at Wave I, but not at Wave II. Recall that this class difference in percentage patterns also occurred in Phase I when LOAM was used as an indicator. However, in Phase I the relationship was significant at Wave I while in Phase III the relationship was not significant at either Wave I or Wave II.

Although not statistically significant, the predicted pattern of percentages was observed at both waves among the black lower class females. Furthermore, this pattern was slightly more pronounced when Wave I indicators were used than when Wave II indicators were used.

Summary of Phase III

When bivariate contingency tables comparing the relationship between intergenerational mobility attitudes measures and parity were analyzed, no significant differences were found. See summary Table 18. In general, the distributions were in the direction predicted by the SMF Hypothesis. Exceptions were IGOM66 in the white lower class and IGEM66 and IGOM68 in the white middle class and IGEM68 for the black lower class. The percentage distributions for IGOM66 in the white lower class were irregular while the distributions for IGEM66 and IGOM68 in the white middle class were not in the predicted direction. For the whites, these exceptions were generally consistent

Table 18. Summary of Phase III Test of the SMF Hypothesis

Intergenerational Mobility Measure	Social Class	Hypothesis Supported
IGEM66	White Lower Class	No
	White Middle Class	No
	Black Lower Class	No
IGEM68	White Lower Class	No
	White Middle Class	No
	Black Lower Class	No
IGOM66	White Lower Class	No
	White Middle Class	No
	Black Lower Class	No
IGOM68	White Lower Class	No
	White Middle Class	No
	Black Lower Class	No

with the percentage distributions of Phase I. The pattern of percentages was not consistent for blacks between Phase I and III. As in the case of Phase I and II, the results of Phase II and III were not strictly comparable.

Phase IV: Correlation and Regression Analysis of Intergenerational Mobility Attitudes and Early Fertility

To briefly summarize the results of the preceding phases, the chi-square analyses of Phase I revealed that there were some significant differences in parity for whites by indicators of mobility attitudes, but not for blacks. The social mobility table analysis of Phase II revealed that the mean fertility was generally lower for the mobility oriented than for the non-mobility oriented in the class of origin for both racial groups. Yet, there were no significant differences, as tested in Phase III, in parity by intergenerational mobility attitudes which were more directly anchored in measures of social origins than were the measures of Phase I or II.

The correlation and regression analyses in Phase IV used as variables the two intergenerational mobility measures introduced in Phase III (IGEM and IGOM) and actual early fertility behavior. The means and standard deviations of each indicator were also computed.

Correlation Analysis

An examination of Table 19 showed there was only partial support for the SMF Hypothesis in the white lower class. Neither indicator of

119

Table 19. Correlations, Means, and Standard Deviations for White Lower Class.[a]

	IGEM66	IGOM66	IGEM68	IGOM68	ATTFER	Mean	Standard Deviation
IGEM66	---	.287** (104)	.658** (116)	.109 (106)	-.106 (140)	1.92	1.27
IGOM66		---	.232* (81)	.697** (75)	.016 (111)	36.54	27.12
IGEM68			---	.121 (127)	-.281** (140)	1.92	1.33
IGOM68				---	-.359** (136)	33.49	27.85
ATTFER					---	.59	.78

[a] The numbers given in parentheses are the n's.
* Probability levels are less than .05 under Ho: Rho = 0.
** Probability levels are less than .01 under Ho: Rho = 0.

intergenerational mobility orientations measured at Wave I was significantly correlated with subsequent early fertility. However, both indicators measured at Wave II were significantly correlated with fertility in a negative direction, thus lending support to the hypothesis. But, IGOM68 explained a low 13 percent of the variance in fertility and IGOM68 explained an even lower 8 percent.

There was a significant but low positive correlation between IGOM66 and IGEM66 and between IGOM68 and IGEM68. The correlation between IGOM66 and IGEM66 could be interpreted that as attitudes for intergenerational occupational mobility for the future family increased at Wave I, the attitudes for intergenerational educational mobility for self necessarily increased by one fifth and vice versa. Since IGOM66 occurred prior to IGEM68, it could be inferred from the positive correlation between IGOM66 and IGEM68 that there was a small causal relationship from IGOM66 to IGEM68 in the white lower class. Then again, this correlation could have been spurious due to the correlation between IGOM66 and IGEM66.

For the white lower class, IGEM66 was positively correlated with IGEM68 and IGOM66 with IGOM68. However, the magnitude of these correlations indicated that other factors were also operating on the intergenerational mobility attitudes measured at Wave II. The Wave I indicators explained less than 50 percent of the variance in the respective Wave II indicators.

Examining the means and standard deviations revealed that though the mean IGEM score decreased from Wave I to Wave II, its standard deviation increased. The mean IGOM score did not change but its standard deviation increased also. Comparing Table A16 and A17 in Appendix A showed that the increase in standard deviation for IGOM was due to the small increase in the extreme deviations from the mean. This was not the case for IGEM; in fact, the percent of respondents in the extreme categories decreased.

The effect of intergenerational mobility attitudes on fertility appeared to operate differently in the white middle class than in the white lower class. For example, in the lower class the sign of the correlation between fertility and IGEM66 was negative and between IGOM66 and fertility the sign was positive, but neither correlation was significant. In the middle class the signs of the correlations were reversed and IGOM66 was significant, lending some support to the hypothesis. See Table 20 for the correlations, means and standard deviations. In addition, neither IGEM68 or IGOM68 was significantly correlated with fertility in the middle class as they had been for the lower class.

For the white middle class IGOM66 explained 13.5 percent of the variance in fertility, a slight increase over the amount IGOM68 explained for the white lower class. Caution should be taken when making these class comparisons, however, since the number of respondents in the white middle class was 50 to 60 less than the number in the white lower class. Because of this fact, the correlations for the white middle class are somewhat less reliable.

In contrast to the correlations obtained for the white lower

Table 20. Correlations, Means, and Standard Deviations for White Middle Class.[a]

	IGEM66	IGOM66	IGEM68	IGOM68	ATTFER	Mean	Standard Deviation
IGEM66	---	.036 (67)	.788* (68)	.157 (62)	.123 (87)	1.58	1.56
IGOM66		---	-.025 (49)	.463** (46)	-.368** (68)	.65	27.85
IGEM68			---	.109 (77)	-.061 (84)	1.87	1.50
IGOM68				---	.005 (81)	8.46	22.40
ATTFER					---	.40	.66

[a] The numbers given in parentheses are the n's.
* Probability levels are less than .05 under Ho: Rho = 0.
** Probability levels are less than .01 under Ho: Rho = 0.

class, there were no significant correlations between IGOM66 and IGEM66 or between IGOM66 and IGEM68. Perhaps a more important class difference in the interrelatedness of the indicators of intergenerational social mobility orientations concerned the magnitude of the correlations between the Wave I measures and the respective Wave II measures. For the white lower class the correlations between IGOM66 and IGOM68 and between IGEM66 and IGEM68 were approximately equal (.658 and .697, respectively). Among the white middle class the magnitude of these correlations differed substantially. While the correlation between IGEM66 and IGEM68 increased to .788 in the white middle class, the correlation between IGOM66 and IGOM68 dropped to .463.

The means of both measures of intergenerational mobility orientations (IGEM and IGOM) increased from Wave I to Wave II while their quite large standard deviations decreased slightly. The mean IGEM66 score at Wave I was .30 lower for the white middle class than for the white lower class, but at Wave II the means were about equal. As expected, the mean IGOM score was about thirty points higher for the white lower class than for the white middle class at both waves. It was interesting to note that the mean for the white middle class was near zero. This result can be explained by reference to Tables A16 and A17 and to the standard deviations. For instance, Table A17 shows that 32 percent of the respondents had IGOM scores less than zero, 31 percent were in the zero to fifteen range, and 37 percent had IGOM scores above 15. There was also a substantial difference in the mean fertility of the white lower class (.59) and the white middle class (.40).

The racial differences were even more outstanding than the class differences (see Table 21). Although the correlation coefficients for all four indicators of intergenerational mobility orientations were in the direction predicted by the SMF Hypothesis, only IGEM68 was significantly correlated with early fertility behavior among the black lower class. The amount of explained variance in fertility by this one variable was only 2 percent -- one fourth of that explained by IGEM68 in the white lower class.

The correlation between IGEM66 and IGEM68 was significant, but .10 lower than it was for the white lower class. For the black females, IGOM66 and IGOM68 were not even significantly related. In addition, the mean IGOM score was 10 points higher at both waves for the blacks than for the white lower class and the mean IGEM score was more than .50 higher at both waves. The mean fertility was about equal, however.

Regression Analysis

The results of the regression analysis in the white lower class were in general agreement with those found in the correlation analysis. See Table 22 for the regression statistics by model; the models used in Phase IV were presented in Table 8.

When IGEM66 and IGOM66 were used to predict subsequent early fertility behavior in a multivariate context, neither of the betas,

Table 21. Correlations, Means and Standard Deviation for Blacks.[a]

	IGEM66	IGOM66	IGEM68	IGOM68	ATTFER	Mean	Standard Deviation
IGEM66	---	.070 (129)	.558** (141)	.045 (128)	-.108 (155)	2.51	1.47
IGOM66		---	.097 (115)	.128 (113)	-.032 (136)	46.29	26.18
IGEM68			---	.066 (153)	-.155* (166)	2.64	1.61
IGOM68				---	-.103 (163)	48.44	23.48
ATTFER					---	.56	.82

[a] The numbers given in parentheses are the n's.

* Probability levels are less than .05 under Ho: Rho = 0.

** Probability levels are less than .01 under Ho: Rho = 0.

Table 22. Regression Analysis of White Lower Class Females - Summary Statistics.

Model	b	standard b	R^2	F
FERT	---	---	.003	.152
IGEM66	-.037	-.057	---	---
IGOM66	.001	.012	---	---
FERT	---	---	.177	13.267**
IGEM68	-.107*	-.230*	---	---
IGOM68	-.008*	-.328*	---	---
IGEM68	---	---	.403	26.348**
IGEM66	.589*	.602*	---	---
IGOM66	.005	.116	---	---
IGOM68	---	---	.493	33.605**
IGEM66	-2.624	-.109	---	---
IGOM66	.742*	.721*	---	---

* The unstandardized beta was twice its standard error.
** Probability levels were less than 0.05.

7

nor the F statistic for the model, was significant at the .05 level of probability for the white lower class. The amount of explained variance, therefore, was extremely small (.003).

The betas for IGEM68 and IGOM68 were both significant, as was the F statistic for the model, when the Wave II indicators were regressed on fertility. Therefore, the hypothesis had partial support in the white lower class. The magnitude of the standardized betas resembled closely the corresponding magnitudes in the correlation analysis. The amount of explained variance in fertility (17.7 percent) was higher than the R^2 of either model predicting fertility in the white middle class (Table 23) or in the black lower class (Table 24).

In the regression analysis for the white middle class, IGOM66 was again a significant predictor of fertility behavior. The model including IGEM66 and IGOM66 was significant but the amount of explained variance, which had been 13.5 percent in the bivariate case, dropped to 12.8 in the multivariate case. See Table 23 for the regression statistics by model for the white middle class. When the Wave II indicators of intergenerational mobility attitudes were regressed on fertility neither beta was significant.

The two models used to test the interrelationships between IGOM and IGEM showed results similar to that of the correlation analysis also, except that in all cases the betas were larger than the correlation coefficients had been. The F statistic for both models was significant though the model used to predict IGEM68 explained 66 percent of the variance while the model used to predict IGOM68 explained

Table 23. Regression Analysis of White Middle Class Females - Summary Statistics.

Model	b	standard b	R^2	F
FERT	---	---	.128	4.678*
IGEM66	.056	.129	---	---
IGOM66	-.008*	-.338*	---	---
FERT	---	---	.007	.271
IGEM68	-.031	-.070	---	---
IGOM68	-.001	-.041	---	---
IGEM68	---	---	.662	45.035*
IGEM66	.694*	.820*	---	---
IGOM66	-.006	-.128	---	---
IGOM68	---	---	.291	8.616*
IGEM66	2.008	.140	---	---
IGOM66	.427*	.508*	---	---

* The unstandardized beta was twice its standard error.
** Probability levels were less than 0.05.

Table 24. Regression Analysis of Black Lower Class Females - Summary Statistics.

Model	b	standard b	R	F
FERT	---	---	.008	.530
IGEM66	-.050	-.087	---	---
IGOM66	-.001	-.025	---	---
FERT	---	---	.030	2.294
IGEM68	-.079	-.157	---	---
IGOM68	-.002	-.062	---	---
IGEM68	---	---	.328	27.286*
IGEM66	.575*	.565*	---	---
IGOM66	.004	.069	---	---
IGOM68	---	---	.031	1.687
IGEM66	-.410	-.025	---	---
IGOM66	.163	.176	---	---

* The unstandardized beta was twice its standard error.
** Probability levels were less than 0.05.

only 29 percent of the variance.

The racial differences that were apparent between the white lower class and the black lower class concerning support of the hypothesis in the correlation analysis were clearer in the regression analysis. Neither of the multivariate models used to predict fertility were significant for the blacks. But again, all of the betas were in the predicted direction with the beta for IGEM68 having the largest magnitude (See Table 24 for the regression statistics for the black lower class.). Recall that the correlation coefficient between IGEM68 and fertility was significant in the previous analysis section.

When IGEM66 and IGOM66 were used to predict IGEM68, the beta for IGEM66 was significant, as was the model, which explained 33 percent of the variance; the beta for IGOM66 was not significant. In the regression model attempting to predict IGOM68 neither beta was significant.

Summary of Phase IV

There were racial and class differences in partial support of the SMF Hypothesis. Since support for the hypothesis entailed a significant, negative linear relationship between intergenerational mobility measures and subsequent early fertility, Wave II measures were supportive in the white lower class for the correlation and regression analyses. Wave I indicators were not significant predictors of fertility in the white lower class. For both the correlation and regression analyses, only IGOM66 lent support for the hypothesis in the white middle class. The correlation analyses in the black lower class showed that IGEM68 was significantly related to fertility in a negative direction, but the regression analysis did not reveal any significant betas.

For whites of both classes, IGOM and IGEM were positively related with subsequent measures of IGOM and IGEM in the correlation and regression analyses, but the magnitude of these relationships differed by class. Among the black females only IGEM was a fairly stable variable.

Phase V: Path Analysis

In Phase IV it was shown from the zero-order correlations and the regression analysis that the indicators of intergenerational social mobility which were statistically significant predictors of early fertility behavior varied between the white lower class and the white middle class and between the white lower class and the black lower class. Phase V reanalyzed the correlations and all the models of the regression analysis except one[8] in a system of recursive equations, using only those respondents for whom data was available on all five indicators.[9] As discussed in the methods section of the preceding chapter, intra-model and inter-model comparisons were made of the recursive system presented in Figure 6.

---

[8] The regression model Fertility = IGEM66 + IGOM66 was not included in the path analysis system because theoretically it was assumed that the effects of these Wave I indicators on fertility were mediated through the Wave II indicators, perhaps a falacious assumption for this system considering the lower than expected correlations between the Wave I and Wave II indicators of intergenerational mobility attitudes, but an assumption consistent, nonetheless, with the extensions of the Heise model made by Cosby and Ohlendorf (1973) upon which this system was based.

Intra-Model Analyses

Model I: The White Lower Class. A comparison of Tables 19 and 25 showed that when only those respondents for whom data was available on all five indicators were considered, the magnitude of the correlations, the means and the standard deviations were generally lower. The exceptions involved the IGOM indicators. The correlation between IGOM66 and fertility was negative in Phase V whereas it had been positive in Phase IV. The standard deviations of these two indicators were also slightly higher. Nevertheless, the variables which were significantly correlated remained constant in both phases.

The correlation between the exogeneous variables IGEM66 and IGOM66 (.258) was reported next to the curved double arrowed line in Figure 7. Table 25 reported this correlation as significant. Comparing the path coefficients, reported above the uni-directional arrows, indicated that IGEM was 80 percent as stable over time as IGOM for the white lower class. The cross-lagged paths showed the effect of IGEM66 on the subsequent IGOM68 measure was in the opposite direction of that of IGOM66 on IGEM68. That is, a one standard

---

[9] It was necessary to use such a subset of the data in order to examine the direct and indirect effects of IGEM and IGOM on fertility.

Table 25. Correlations, Means and Standard Deviations for White Lower Class.

	IGEM66	IGOM66	IGEM68	IGOM68	ATTFER	MEAN	STANDARD DEVIATION
IGEM66	--	.258*	.653**	.055	-.068	1.79	1.17
IGOM66		--	.263*	.729**	-.147	35.37	27.25
IGEM68			--	.129	-.238*	1.88	1.14
IGOM68				--	-.307**	31.58	28.12
ATTFER					--	.42	.60

* Probability levels are less than 0.05 under Ho:Rho=0.
** Probability levels are less than 0.01 under HO:Rho=0.
n = 71.

134

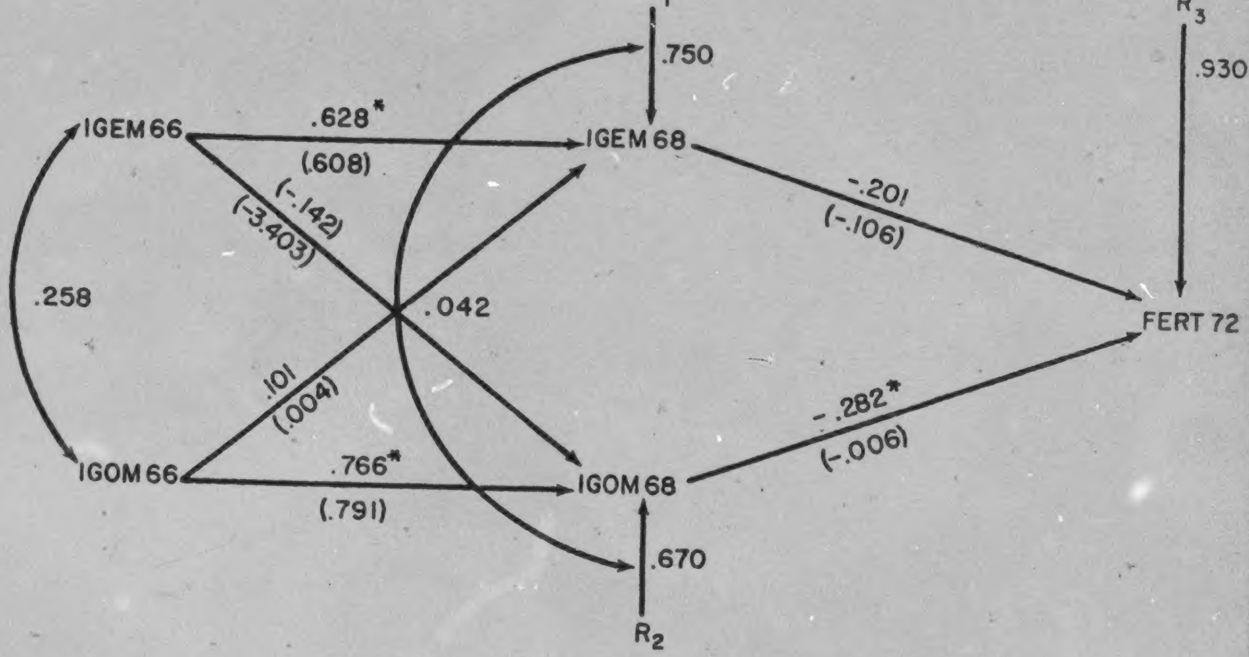


Figure 7. Path model 1 of the relation of fertility behavior to antecedent intergenerational mobility measure (white lower class n = 71).

Standardized path coefficients are reported above the path arrows and unstandardized coefficients are reported in parentheses below the path arrows. Path coefficients which were at least twice their standard error are denoted by an asterisk.

deviation increase in IGEM66 resulted in a .142 decrease in the standard deviation of IGOM68, whereas a one standard deviation increase of IGOM66 resulted in a .101 increase in that of IGEM68. However, neither of these cross-lagged paths were significant.

The path coefficient for the direct effect of IGOM68 on fertility was larger than that of IGEM68 on fertility and the former path was significant while the latter was not. Thus for the white lower class females, intergenerational occupational mobility attitudes were not only more stable than intergenerational educational mobility attitudes but had a stronger negative effect on subsequent fertility.

Model II: The White Middle Class. Comparing the correlation coefficients of Phase IV (Table 20) with those of Phase V (Table 26) for the white middle class, it was found that the magnitude of the correlations between the indicators of intergenerational mobility attitudes and fertility in the subset of females under consideration in Phase V was generally lower. However, the correlations examining the interrelatedness of the indicators of intergenerational mobility attitudes were generally higher in Phase V than they were in Phase IV. As for the white lower class, the variables which were statistically significant were the same in both phases for the white middle class.

The path coefficients of Figure 8 showed that the indicator IGOM was only 60 percent as stable from Wave I to Wave II as IGEM, while IGOM had been the more stable measure for the white lower class. The cross-lagged effects again operated in opposite directions, but the pattern was reversed for the white middle class, but neither was

Table 26. Correlations, Means and Standard Deviations for White Middle Class.

	IGEM66	IGOM66	IGEM68	IGOM68	ATTFER	MEAN	STANDARD DEVIATION
IGEM66	--	.092	.824**	.187	.109	1.31	1.63
IGOM66		--	-.044	.521**	-.333*	4.12	27.81
IGEM68			--	.184	-.021	1.61	1.41
IGOM68				--	-.120	6.88	23.37
ATTFER					--	.49	.73

* Probability levels are less than 0.05 under Ho:Rho=0.
** Probability levels are less than 0.01 under Ho:Rho=0.
n = 45.

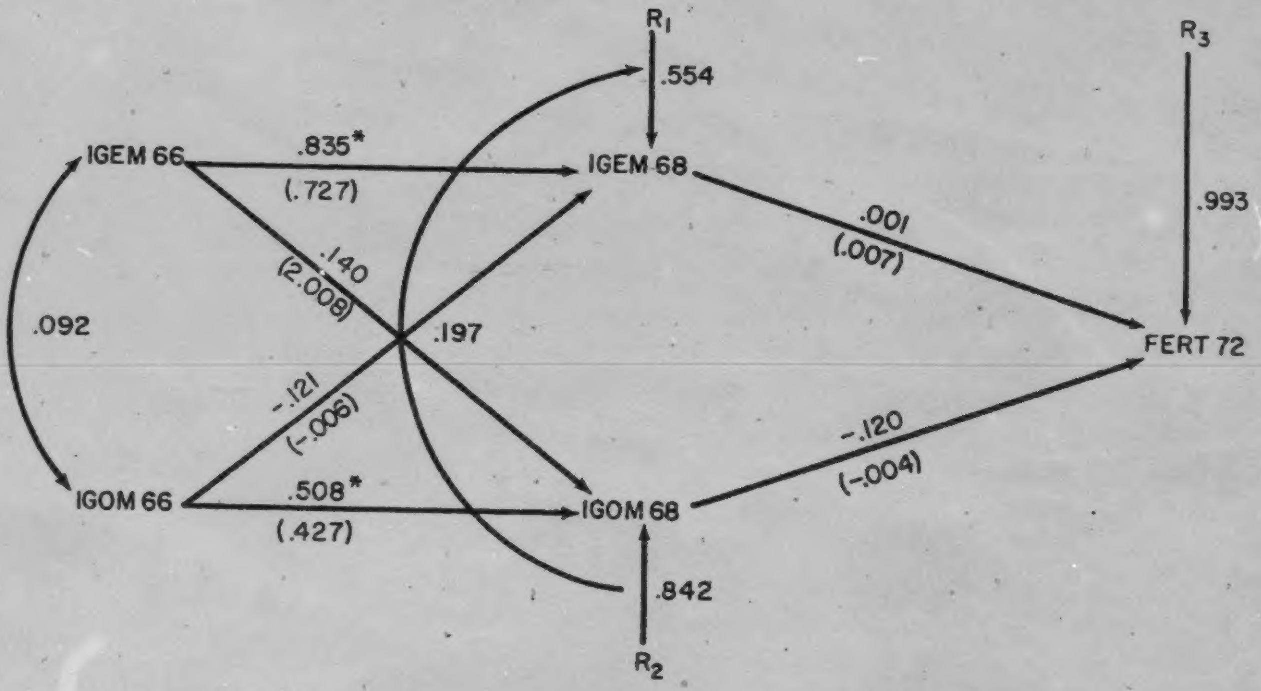


Figure 8. Path model 2 of the relation of fertility behavior to antecedent intergenerational mobility measure (white middle class n = 45).

Standardized path coefficients are reported above the path arrows and unstandardized coefficients are reported in parentheses below the path arrows. Path coefficients which were at least twice their standard error are denoted by an asterisk.

significant. The effect of IGEM66 on IGOM68 was positive while the effect of IGOM66 on IGEM68 was negative. As in previous phases, neither of the Wave II indicators of intergenerational mobility attitudes had a significant effect on subsequent fertility for females in the white middle class. The fact that the correlation between IGOM66 and fertility was significant but the path coefficient from IGOM68 to fertility was not significant may have resulted from the low stability of the IGOM indicator.

Model III: The Black Lower Class. The comparison of Phase IV and Phase V correlation coefficients (Tables 21 and 27) revealed no systematic changes. There were two important differences though. Using the subset of black females for whom data was available on all five indicators, the correlation between IGOM66 and IGEM68 was significant while the correlation between IGEM68 and fertility was not as significant as it had been in Phase IV. The means were lower for the Phase V indicators with the exception of fertility, which was higher.

The high degree of instability of IGOM among black females was reported in Figure 9. There it can be seen that the effect of IGOM66 on IGOM68 was not significant. The effect of IGEM66 on IGEM68 was three times higher and reached the level of significance. The sign pattern of the cross-lagged effects was the same as for the white lower class; IGEM66 had a slightly negative effect on IGOM68 and IGOM66 had a significant positive effect on IGEM68. Though neither of the paths from the Wave II indicators of intergenerational mobility

Table 27. Correlations, Means and Standard Deviations for Blacks.

	IGEM66	IGOM66	IGEM68	IGOM68	ATTFER	MEAN	STANDARD DEVIATION
IGEM66	--	.097	.538**	-.008	-.132	2.44	1.47
IGOM66		--	.214*	.174	-.032	44.04	25.87
IGEM68			--	-.019	-.154	2.69	1.46
IGOM68				--	-.084	47.65	23.89
ATTFER					--	.62	.82

* Probability levels are less than 0.05 under Ho:Rho=0.
** Probability levels are less than 0.01 under Ho:Rho=0.
n = 108.

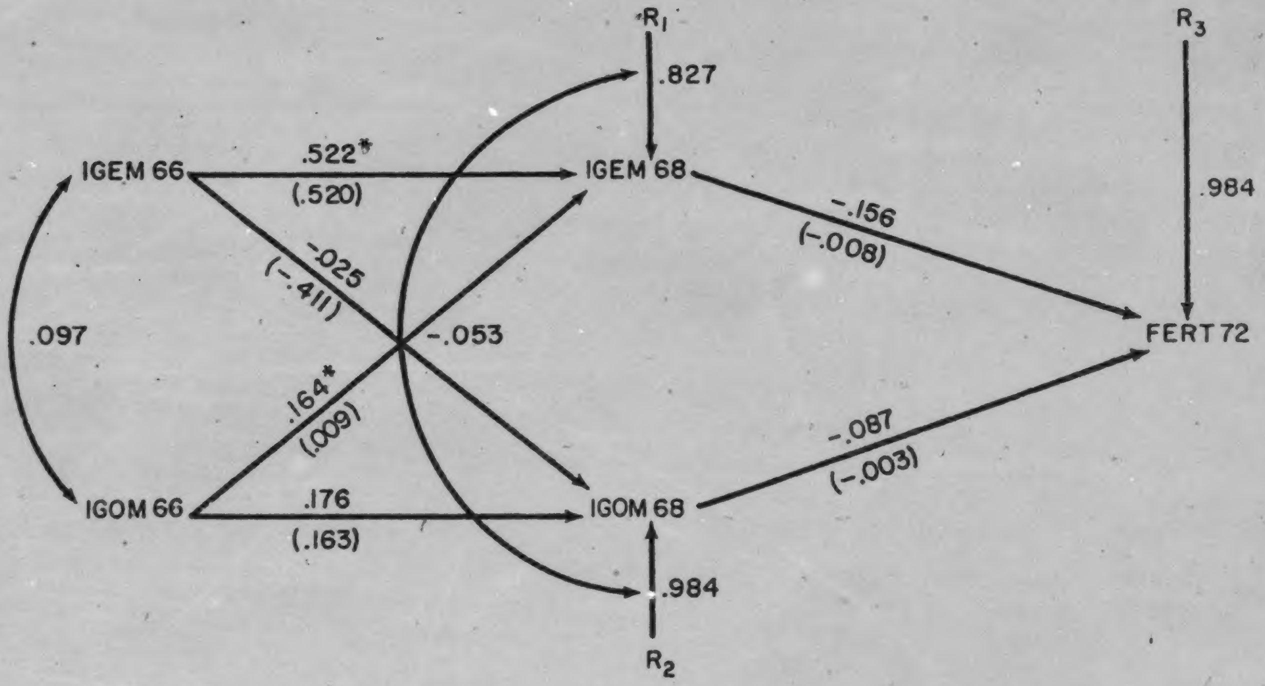


Figure 9. Path model 3 of the relation of fertility behavior to antecedent intergenerational mobility measure (black lower class n = 108).

Standardized path coefficients are reported above the path arrows and unstandardized coefficients are reported in parentheses below the path arrows. Path coefficients which were at least twice their standard error are denoted by an asterisk.

attitudes to fertility were significant, the sign of the effects was in the predicted direction.

Inter-Model Analyses

Class Comparisons. The existence of class differences in the interrelationships between indicators of intergenerational mobility attitudes as well as between these indicators and fertility were apparent by comparing Figures 7 and 8. It was noted earlier that there was a significant positive correlation between Wave I indicators of IGEM and IGOM among the white lower class. While the correlation was also positive for the middle class, it was not significant. Thus at Wave I there was a linear relationship between IGEM66 and IGOM66 with a slope of about one fifth for the white lower class; the indicators are either independent, which is unlikely, or related in a curvilinear manner, which is more plausible, among the white middle class.[10]

Comparing the paths which estimate the stability of IGEM and IGOM, the magnitude of the effect of IGOM66 and IGOM68 was almost twice as high for the white lower class as for the middle class, while the effect of IGEM66 on IGEM68 did not differ as greatly for the two classes. From this it would appear that while the desire to attain an educational level higher than one's parents permeates both classes with about the same impact, the desire to improve one's social status through husband's occupation is a more tentative and fluctuating phenomena in the middle class than in the lower class.

---

[10] The term curvilinear as used herein refers to any non-linear, non-additive relationship.

There was not much difference in the effect of IGOM68 on early fertility between the two classes, but the magnitude of the difference of the effect of IGEM68 on fertility was over one tenth of a child -- a substantial difference when one considers that the mean fertility was less than .50 for both classes. While the sign of the coefficient of the path from IGEM68 to fertility was different for the two classes, this fact should not be overemphasized due to the extremely small magnitude of the positive coefficient for the white middle class.

Racial Comparisons. The discussion above concerning the problem of the exogeneous variables being significantly correlated in the white lower class applied also to the discussion of racial differences since IGEM66 and IGOM66 were not significantly correlated among the black females either. Once again IGOM66 may be relatively independent of IGEM66 or related in a curvilinear manner among the blacks. In addition, one of the cross-lagged paths, IGOM66 on IGEM68, was significant among the blacks whereas neither of the cross-lagged paths were significant among the white lower class.

The magnitude of the path coefficient which estimated the stability of IGOM was over four times larger for the white lower class than for the black. The difference in the estimates of the stability of IGEM were even less between the white and the black lower classes than between the white lower and middle classes.

There were also racial differences in the effect of Wave II indicators of intergenerational mobility attitudes on fertility and therefore support of the hypothesis. The effect of IGOM68 on early fertility for blacks was one half of what it had been for the white lower class. The effect of IGEM68 on subsequent fertility for blacks differed from that of the white lower class by almost one tenth of a child.

Summary of Phase V

The path model proposed to test the SMF Hypothesis "fit" best among the white lower class. In that race-class grouping the mobility attitudes were fairly consistent from Wave I to Wave II, there were no significant cross-lagged effects, and the direct effect of IGOM68 on fertility was significant. In addition, the direct effect of IGEM68 on fertility was substantial, but not of sufficient magnitude to be significant.

Among the white middle class differentials in the stability of intergenerational mobility attitudes existed; IGEM was more stable than IGOM. Neither of the cross-lagged paths were significant, and the signs of the paths were reversed from those in the white lower class. Neither of the direct effects from the Wave II indicators to fertility were significant, so the hypothesis was not supported, and only the effect from IGOM68 to fertility was in the predicted direction.

Differentials in the stability of intergenerational mobility attidues also existed among the black lower class. In fact, IGOM was so unstable, the direct effect from IGOM66 to IGOM68 did not even reach the level of significance. The positive cross-lagged path from IGOM66 to IGEM68 was significant, while the negative path from IGEM66 to IGOM68 was not. Neither of the direct effects from the Wave II indicators to fertility were significant so again, the hypothesis was not supported. However, both of the effects were in the predicted direction, with the effect of IGEM68 being the stronger.

CHAPTER V

SUMMARY, LIMITATIONS AND IMPLICATIONS

Introduction

In this thesis, trends in fertility research investigating fertility differentials among socioeconomic groupings were first overviewed and the Social Mobility-Fertility Hypothesis was presented as one plausible explanation; alternative explanations were also given. In addition, trends in social mobility research were presented -- the social mobility model and the status attainment model. But, in order to understand the basic differences in these two trends, it was necessary to first delineate several components of the concept "movement". The social mobility model was then distinguished from the status attainment model on the basis of the conceptual framework used in each. The underlying assumptions of the SMF Hypothesis were then presented, again within a developmental framework. This was followed by a presentation of and justification for viewing the SMF Hypothesis as involving four distinct conceptual dimensions. The review of the empirical research testing the hypothesis was structured along these four dimensions.

The above was done in order to set the stage for a fairly thorough examination of the Attitudinal-Behavioral dimension of the SMF Hypothesis. As pointed out previously, the review of the literature made obvious several weaknesses in the prior studies. First, few studies have been concerned with the Attitudinal-Behavioral dimension, and of those that have been, the conceptualization and operationalization of social mobility attitudes were somewhat unrefined. In addition, the temporal ordering of attitudes versus behavior was clouded and the populations used to examine the hypothesis were generally urban (or suburban) white-collar Caucasians. Even within the more researched Behavioral-Behavioral dimension, the results could not be considered conclusive due to differences in methodology, theoretical assumptions and conceptual definitions.

In contrast, this thesis has utilized a panel of black and white disadvantaged, non-metropolitan southern females to examine the Attitudinal-Behavioral dimension of the SMF Hypothesis. Additionally, the design of the Southern Youth Study provided some advantages over prior studies. Since the design was a longitudinal, three-wave study and the first and second waves were conducted prior to high school graduation, the temporal sequence of attitudes and fertility was unquestionable. The hypothesis had never been tested using adolescent attitudes and young adult behavior. In addition, the attitudes were measured at two different time periods and thus it was possible to examine the effect of unstable (or perhaps "uncrystallized") attitudes of social mobility. Furthermore, the research instruments used were more direct measures of social mobility attitudes than those of prior studies in the Attitudinal-Behavioral dimension. Refinements were also made by anchoring these attitudes in the status of origin. Lastly, by conducting a multiphase analysis, wherein each of the methodological procedures employed in the Behavioral-Behavioral dimension were applied to the data, it was possible to determine more accurately the utility of the hypothesis as the theoretical and methodological assumptions varied.

In this, the final chapter, a summary of the empirical findings and the conclusions drawn from these findings will be presented. The theoretical implications of these findings will then be discussed. Lastly, the limitations of the study and the implications for future research will be presented.

Summary of Empirical Findings

In Phase I it was found via contingency tables that when categorical measures of educational aspirations for self and occupational aspirations for desired mate were controlled by broad socioeconomic class distinctions, the SMF Hypothesis was statistically supported in the white lower class. That is, there was a significant difference in the number of women who had children, as opposed to those who did not have children, at Wave III by categorical indicators of social mobility attitudes as measured at Wave I (Sophomores) or at Wave II (Seniors). Though the hypothesis was not supported in the white middle class, it was felt with a larger sample the results would be significant, particulary for the measures of educational aspirations. The hypothesis was not supported in the black lower class when either indicator of social mobility attitudes was used.

When differences in mean fertility were examined via intergenerational educational mobility tables in Phase II, in every case but one the mean fertility of the whites was less among the mobility oriented than among the non-mobility oriented. It was not possible to test the hypothesis among the blacks because there were insufficient cases to calculate the mean fertility of the non-mobility oriented. However, the predicted pattern of decreasing mean fertility as mobility orientations increased was observed. The intergenerational occupational mobility tables again revealed support for the hypothesis among the whites in all cases but one. Among the blacks the hypothesis was supported, but only weakly; though both occupational mobility oriented categories had a mean fertility lower than that of the non-mobility oriented, the mean fertility of the long-distance mobility oriented was greater than that of the short-distance mobility oriented.

In Phase III the distributions of percentages were generally in support of the hypothesis, but no significant differences were found in the contingency tables among either of the white class groupings or among the blacks. That is, there was no significant difference in the number of women who had children, as opposed to those who did not have children, at Wave III by categories of intergenerational educational or intergenerational occupational mobility indicators measured at Wave I or at Wave II.

Phase IV, by using correlation and regression techniques, provided a stronger test for the hypothesis than previous phases and it was here that the racial and class differences in partial support of the SMF Hypothesis became more obvious. In the white lower class, the Wave I indicators of intergenerational mobility attitudes were not significant predictors of early fertility behavior, while the Wave II indicators were. Only one indicator, IGOM66, lent support to the hypothesis in the white middle class. Among the blacks, IGEM68 was significantly correlated with fertility, but in the multivariate regression analysis, the hypothesis was not supported by any of the indicators.

In Phase V only those respondents for whom data was available on all the indicators under consideration were used in the path analysis. Using that subset of the data, the racial and class differences were again obvious. The path analytic model "fit" best among the white lower class since this was the only race-class grouping where a direct effect of IGEM68 was substantial. In the white middle class and in the black lower class neither of the direct effects on fertility were significant. The stability of the intergenerational mobility attitudes was also generally less for the white middle class and the blacks than for the white lower class. Additionally, the cross-lagged path from IGOM66 to IGEM68 was significant among the blacks, whereas none of the cross-lagged paths were significant among the whites.

Thus it can be concluded that both adolescent social mobility attitude indicators were inversely related to subsequent early fertility behavior among the white lower class females. Generally, this relationship held at the senior year in high school but not at the sophomore year. In the white middle class, sophomore occupational mobility attitudes for future family were inversely related to subsequent fertility, but as the females got older (seniors) this relationship lessened, if not disappeared. Educational mobility attitudes were not related to fertility in the white middle class. The hypothesis could not be considered supported under linear assumptions among the black lower class females when either indicator of social mobility attitudes was used.

Theoretical Implications

One of the underlying assumptions of the SMF Hypothesis presented earlier was that the value orientations which are supportive of mobility aspirations are class specific. In addition, Peterson (1961) assumed that the middle class has higher aspirations, and persons in that socioeconomic grouping are more pressured to limit their families. Yet, the results of this thesis show that for the females in the Southern Youth Study, the effect of social mobility attitudes in limiting early fertility was stronger in the white lower class than in the white middle class.

For the white middle class educational mobility attitudes had no effect on subsequent fertility and occupational mobility had only a weak effect. In this study regardless of the mobility attitudes, the early fertility level was approximately equal among the middle class; sixty-eight percent had no children. This could be a reflection of class specific values encouraging contraceptive usage and therefore postponement of children or a value encouraging postponement of marriage. Either of these values reflect the basically hedonistic orientation which results from a permissive, child-centered middle class subculture.

A developmental pattern was also observed in the middle class. That is, the mobility attitudes expressed at the senior year reflect a constricted range as compared to those at the sophomore year. It was felt this implied a greater expression of the middle class norms at the senior year.[1] Those females who expressed low marital mobility attitudes as sophomores had a higher mean fertility as young adults than those who expressed higher attitudes. Yet, when they expressed the more normative attitudes as seniors there was no effect on subsequent fertility. From this it could be inferred that these seniors were exhibiting the "proper patterns of behavior which are considered to be characteristic of [their parents'] status achievement" (Bensman and Westoff, 1954:2-3), but had not internalized these attitudes and the motivation to achieve them.

Or, it may be that in the middle class early fertility is not seen as inconsistent with having high mobility attitudes, particularly educational mobility attitudes. One could anticipate that a female with high educational aspirations would marry a man with high status or mobility potential. And, if one feels secure about the future status of her mate, children may not be considered a handicap since middle class parents can temporarily help ease the financial strain. Or she can go to work to bring in additional funds; it may be that a person with high aspirations has a greater income earning capacity.

---

[1] Sixty percent wanted to go to a junior or four year college and seventy percent wanted a mate working in a middle class occupation. An additional eight percent wanted additional college and twenty percent wanted a mate in an upper class occupation.

In contrast, for the white lower class both educational and marital mobility attitudes at the senior year had a significant effect on subsequent fertility. A plausible explanation for this phenomena is that many of the lower class whites have internalized the values of "middle class America" as expressed through the mass media and the educational system. As a result, a gap exists between their value orientations and their objective reality and a concomitant need for mobility develops.

Sewell et al. (1970) have reported that lower class males receive less support from significant others than middle class males. They felt,

> ... the higher a person's socioeconomic status, the higher will be the socioeconomic status of those with whom he interacts and the more likely he will be to expect from them behavior signaling higher socioeconomic status ... Significant others' influence consists primarily of the educational and occupational status expected of a youth or exhibited to him ... We therefore expect that a youth's levels of aspiration will be fairly consistent with the status levels expected of him or exhibited to him by his significant others. (Sewell et al., 1970:1015)

If this conclusion applies to females as well, the process of mobility for the lower class may be centered on personal achievements and sacrifices, such as a delay in fertility, rather than on significant others' expectations or behavior. This is also seen in the fact that, by definition, the lower class female and her family of orientation have fewer financial resources at their disposal to facilitate realization of their personal value orientations than middle class females.

At the same time, a significant portion of the lower class females had not internalized and did not express middle class values. In fact, the developmental pattern observed in the white lower class was the opposite of that observed in the middle class. The mobility orientations at the senior year were generally lower than the mobility orientations at the sophomore year. Thus, more of the lower class females were accepting their status of origin at the senior year rather than expressing the middle class values. This could have been due to a realization of structural goal blockages or personal goal blockages, such as poor academic performance or the expectation of a lower class husband.[2] In either case, higher fertility was associated with these lower mobility orientations at the senior year while a lower fertility had been observed at the sophomore year.

For the black lower class it was concluded that from the perspective of a linear model social mobility attitudes had little or no effect on subsequent fertility. However, there appeared to be a negative effect on fertility due to short distance marital mobility orientations. That is, fertility decreased with aspirations to move into the middle class but not with aspirations to move into the upper class. In fact, the mean fertility was higher among those with upper class marital mobility orientations than it was for those with orientations for the middle class. When unanchored marital mobility orientations were examined in the contingency tables the effect was also parabolic. When discrete measures of status of origin were used to anchor marital mobility orientations, fertility decreased slightly with increasing aspirations. This short-distance effect may be due to the fact that there are few black upper class role models and most of those blacks who have "made it" to the upper class have been in the glamour professions, e.g. show business, athletics, ministers; access to and maintenance of these professions may not be seen as requiring the "normal" sacrifices, such as postponement or limitation of children.

---

[2] At the sophomore year 43 percent expected a lower class husband while at the senior year this percentage increased to 55 percent. The percent having an aspiration for a mate in the lower class remained the same over time -- 23 percent.

On the other hand, the effect of educational mobility orientations on fertility was concentrated in long-distance aspirations, particularly at the senior year of high school. While aspirations for vocational training or junior college had little or no effect in attenuating fertility, high educational aspirations were associated with a substantial decrease in fertility. The reasons for the latter phenomena may be similar to explanations given for the members of the white lower class who internalized middle class educational values, e.g., lack of motivational and financial support resulting in the need for personal sacrifices to achieve mobility. The fact that aspirations for additional training after high school but not a college degree has little effect on fertility in the black lower class, but does suppress fertility in the white lower class needs further examination. It may be that these blacks are merely expressing, with no internalization or motivation, the dominant values of society concerning educational improvement (Thomas, 1970). Or it may be that attaining a high school degree requires more sacrifices for blacks than whites and therefore the blacks perceive that some educational training beyond high school requires little additional personal sacrifices. Alternately, vocational training or some college may be perceived as requiring more sacrifices by whites.

The fact that there was a significant effect from the sophomore marital mobility attitudes to the senior educational mobility attitudes would seem to imply that orientations for mobility became concentrated over time in self, rather than through just mate (as in the middle class) or both (as in the white lower class). This concentration on self as a means to mobility may be due to the proposed black matriarchial family[3] or the out-migration of available mates due to the draft or occupational advantages in urban areas. Another plausible explanation is that the black subculture values female achievement more than the white subculture and the perception of this becomes greater with age. In any case, marital mobility attitudes were also extremely unstable.

---

[3] Twenty-seven percent of the black females lived in homes where the mother and father were not both present. In thirty-five percent of the families, someone other than the father was the main breadwinner.

Another finding which may have theoretical implications is the observation that 63 percent of the black females had no children, despite the fact that 78 percent were from families with four or more children. Research has shown that persons from large families tend to have larger families than persons who had a smaller number of siblings. This would seem to imply that more research needs to be conducted concerning the influence of size of family of orientation on size of family of procreation, with particular attention given to timing of first birth. By controlling their early fertility, this cohort of black female high school graduates may well attain their expressed desire for small families (Knapp and Boyd, 1970). Additionally, as pointed out by McAllister, Stokes and Knapp (1974), the influence of size of family of orientation should be examined within categories of intergenerational mobility orientations, especially since many of the blacks are seemingly rejecting their parents values for middle class values.

Limitations and Implications for Future Research

Generalizability

The Southern Youth Study is a panel, not a representative sample, so the results of the preceding analysis are not strictly generalizable to a larger population.[4] Nevertheless, this thesis was not meant to be definitive but rather exploratory, in the sense of redirecting research in the Attitudinal-Behavioral dimension of the SMF Hypothesis to different populations. Goldberg excluded young couples from his sample under the assumption that "the relationship between status and fertility has been undergoing considerable change in the younger generations" (Goldberg, 1959:215). If this assumption is correct, further research in the younger cohorts is imperative. Additionally, the findings of this research imply that the process of social mobility among lower class disadvantaged youth still demands sacrifices such as postponement of children, but not among middle class youth. This conclusion needs further examination.

---

[4] None of the prior studies in the Attitudinal-Behavioral dimension employed representative samples either.

Additionally, the number of respondents in each of the race-class groupings was small. As a result, small but significant differences would not be observed as such. This can be shown to be the case for the effect of intergenerational educational mobility orientations on fertility among the lower class females; the regression analysis of Phase IV showed there was a significant effect, but when the smaller subset of females was used in the path analysis of Phase V, this effect was no longer significant. Thus, it may be that the effects of marital mobility on fertility among middle class white females and of intergenerational educational mobility orientations on fertility among the black females are "true", small effects, but not detectable as such in this panel.

Quality of Data

Any large scale panel study spanning several years in multiple waves necessitates the involvement of numerous researchers and assistants to accomplish the task of obtaining data that is both broad in terms of geographic scope and has a temporal range. The use of numerous researchers in the project has numerous advantages and disadvantages. The primary disadvantage is the regional project leader's lack of formal control, leading to inconsistency in administration of the research instruments at any wave of data collection and across states, and from wave to wave. At present only limited written knowledge exists on the procedures and circumstances of the research operations in each state. However, the S-81 Technical Committee is presently compiling a post facto documentation of its activities.

The difficulties were perhaps minimized in the Southern Youth Study for several reasons. Several of the cooperating researchers in the various states participated in at least two waves. A common interview schedule was used at all three waves for instruments incorporated in this thesis,[5] thereby providing for repeated measures of the same variables. In Waves I and II the primary means of obtaining data was group administered questionnaires; this method results in less variability of interviewing techniques than personal interviews. Group administered questionnaires also minimize falsification of data by the interviewers. Lastly, a majority of the instruments had structured responses, thereby making them more amenable to administration by multiple interviewers.

---

[5] The questionnaire used in Alabama differed slightly at Wave I since that data was collected under the Southern Appalachia Youth Study.

Measurement Error

A principal weakness of the Duncan SEI scale is that it does not distinguish between types of farmers, only between farm laborers and farm operators or managers. Thus tenant farmers, sharecroppers, and corporation farmers are treated alike; no allowance is made for size of farm or crop, either. In the female subset of the Southern Youth Study, 14 percent of the whites and 26 percent of the blacks reported the breadwinner's occupation as farmer.[6] Some of these SEI scores may be underestimated as a result, particularly among the whites.

It was this researcher's opinion that specificity in reporting occupations decreased as socioeconomic status decreased. Using such a detailed scheme as Duncan's would then result in less accurate coding in the form of underestimation.

Kerckhoff et al. (1974) have attempted to expand and replicate St. John's (1970) study examining the accuracy in students' reports of parents' educational levels and father's occupation. Though their results may not be strictly applicable to this thesis, since both of their samples included only metropolitan youth and Kerckhoff et al. only queried male youth, the potential problems they raised in regards to non-response, age, upgrading, and reading ability in survey data are all pertinent to this study.

---

[6] These percentages are based on the number of respondents who reported the breadwinner's (mother, father, or other) occupation. Few blacks desired or expected their husband to be farmers, but 11 whites in 1966 and 8 in 1968 desired their husbands to be farmers and 6 whites in 1966 and 11 in 1968 expected their husband to be farmers.

As mentioned previously, the Wave II indicator of mother's education was used herein rather than the Wave I indicator on the assumption that seniors were more knowledgeable and thus reported more accurately.[7] In contrast, the breadwinner's occupation was determined by the Wave I response in all states except Louisiana; this may have resulted in less knowledgeable answers.

Zelnik and Kantner (1974) used a national probability sample of 4,611 females aged 15-19 years old in 1970 to examine premarital first pregnancies. They found that black females experienced a premarital pregnancy four times as often as white females (24.8% and 6.2%, respectively). Of the women who experienced a premarital first pregnancy, 8.5% of the black and 50.8% of the white females married before the pregnancy was completed, 7.7% of the blacks as compared to 12.0% of the whites married after the pregnancy was completed, and 83.8% of the blacks as compared to 37.2% of the whites had not married. The never married group included currently pregnant females.

These statistics would tend to raise questions concerning the measurement error in fertility as operationalized herein,[8] particularly for the blacks. However, the apparent underestimation, due to the fact that unmarried females were not always asked how many children they had, may have been minimized due to several factors. This panel consists of high school graduates and it can be anticipated that many, if not most, of the females who experienced premarital pregnancies while in high school dropped out prior to graduation. Thus, premarital pregnancies in the Southern Youth Study would have occurred primarily after graduation, in the 18-22 age group. Secondly, fertility was measured in 1972 when these females were approximately twenty-two years old. It is possible that at this age a greater percentage of those who experienced a premarital pregnancy had subsequently married than in Zelnik and Kantner's (1974) study. Furthermore, Zelnik and Kantner operationalized fertility as first live birth and thus the situations where the child was living with friends or relatives, given up for adoption, or subsequently died were included. Lastly, six percent of the never-married black females in the Southern Youth Study reported having children -- not a gross underestimation from the twenty percent of the Zelnik and Kantner study when the above considerations are taken into account. Thus, the measurement error in fertility in this thesis was not considered severe enough to invalidate the results.

---

[7] It should be noted, however, that in Mississippi only Wave I data was available; therefore, the measurement error in that state may be greater than in the other states.

In all of these variables, if the measurement error was random, it would attenuate the strength of the relationships observed. Thus significant relationships which exist would not be observed. If the error was systematic, it could result in falacious inferences due to the consistency and regularity of the observed relationships.[9]

---

[8] Refer to the operationalization of fertility in Chapter III.

Choice of Variables

McCrory stated recently,

> Since women traditionally have not been the "breadwinners" of the family, educational attainment seems to be the best measure to use. If all women were "breadwinners" then occupational mobility would be a likely index of her mobility; likewise her husband's occupational mobility may reflect the families mobility because of the husband's potential mobility outside the family. Until we witness a significant change and a permanent change over a period of time then potential mobility of women can be studied only through educational attainment or within the structure of the family reflected by the male's occupation. (1974:1-2)

Some would argue that there has been a "significant change" in the female's role within the family structure For instance, females may now be more willing to work for reasons of self-fulfillment or crystallization of status, if not social mobility, than previously. It has been shown that working women have fewer children, but the cause and effect relation is not clear. Therefore, future research in the Attitudinal-Behavioral dimension should examine the effect of occupational mobility attitudes for self on fertility.

---

[9] Such may be the case of the relationships observed in the white middle class.

This analysis was also limited by the fact that this was a secondary analysis. Scott (1958) felt personality measures should be included in models used to explain fertility since persons with "keen and varied" interests may tend to have more children. This researcher would also advocate the inclusion of personality measures in future tests of the SMF Hypothesis, but in order to control for achievement motivation, not "keen and varied" interests. In addition, Tien (1961) concluded number of children was not a sufficiently effective and sensitive measure of fertility, particularly with increasingly effective contraceptive usage. This researcher would agree that the inclusion of a measure of timing from marriage to first birth might be a significant addition to the present model, or might be used in lieu of fertility (number of children).

The Model

Blau and Duncan refer to the correlation between two mobility measures, involving four status variables as a Type I correlation. After examining the possible relationships which may exist under the case of a low and a high correlation, they conclude, "Intergenerational mobility may result from a variety of combinations of intragenerational and intergenerational movements, and most of these combinations depress the correlation between different aspects of intergenerational mobility, such as that between educational and occupational mobility" (Blau and Duncan, 1967:197). The exception is when "fathers are low on both education and occupational mobility"

(Blau and Duncan, 1967:196). If this is true for female educational mobility and marital mobility as well, the implication for the models in this thesis is that the observed interrelationships of IGEM and IGOM would be higher in the lower classes and attenuated in the middle class.

As a final note, the correlation, regression and path models considered herein assume several properties, such as linearity, additivity, equal variance, etc., which may have been violated. However, these techniques are fairly robust. This analysis has not dealt with interaction effects or nonlinear, nonadditive models. It may be that such a model would have more explanatory power, particularly for the blacks since short-distance effects on fertility were observed for marital mobility and long-distance effects for educational mobility.

REFERENCES

Bachi, Roberto and Judah Matras.
1964 "Family size preferences of Jewish maternity cases in Israel." Milbank Memorial Fund Quarterly 42 (April):38-56.

Baltzell, E. Digby.
1953 "Social mobility and fertility within an elite group." Milbank Memorial Fund Quarterly 31 (October):411-20.

Bean, Frank D.
1973 "Components of income and expected family size among Mexican Americans." Social Science Quarterly 54 (July):100-16.

Bensman, J. and C. F. Westoff.
1954 "A theoretical model for research on social and psychological factors affecting fertility." Quoted in M. Micklin, "Urban life and differential fertility: specification of an aspect of theory of demographic transition." Sociological Quarterly 10 (Fall, 1969):480-500.

Beret, J.
1952 "Fertility and social mobility." Population Studies 5 (March):244-60.

Blalock, Hubert M.
1966 "The identification problem and theory building." American Sociological Review 31 (February):52-61.

Blake, Judith.
1966 "Ideal family size among white Americans: a quarter of a century's evidence." Demography 3:154-73.

Blau, Peter M.
1956 "Social mobility and interpersonal relations." American Sociological Review 21 (June):290-95.

Blau, Peter M. and Otis D. Duncan.
1967 The American Occupational Structure. New York: John Wiley and Sons, Inc.

Boggs, Stephen T.
1957 "Family size and social mobility in a California suburb." Eugenics Quarterly 4 (December):208-13.

Boyd, V. A.
1970 "Aspirations, expectations, and attitudes of South Carolina high school students." Report AE 335, Department of Agricultural Economics and Rural Sociology, Clemson University, Clemson, South Carolina.

Brooks, Hugh E. and Franklin J. Henry.
1958 "An empirical study of the relationships of Catholic practice and occupational mobility to fertility." Milbank Memorial Fund Quarterly 36 (July):222-81.

Bumpass, Larry and Charles F. Westoff.
1970 The Later Years of Childbearing. Princeton, New Jersey: Princeton University Press.

Campbell, A. A., P. K. Whelpton, and R. F. Tomasson.
1963 "The reliability of birth expectations of U. S. wives." International Population Conference (London: UNESCO):49-56.

Cain, Janice Sofge.
1973 "The path to occupational attainment: a study of Northeast Alabama youth four years after high school." Unpublished Master's Thesis, Auburn University.

Carter, T. M. and N. D. Carter.
1971 "Status attainment v.s. social mobility: alternative or complementary modes of stratification research?" LSU Journal of Sociology 2 (October):12-33.

Cosby, Arthur G. and George W. Ohlendorf.
1973 "Educational and occupational status projections: stability and reciprocal linkages." Paper presented at the Rural Sociological Society annual meeting, University of Maryland, College Park (August).

Dumont, A.
1890 Depopulation et Civilisation. Paris.

Duncan, Otis Dudley.
1961 "A socioeconomic index for all occupations" and "Appendix B." Pp. 109-38 and 263-75 in Albert J. Reiss, Jr., Otis Dudley Duncan, Paul K. Hatt, and Cecil C. North, Occupations and Social Status. New York: The Free Press of Glencoe, Inc.
1966 "Methodological issues in the analysis of social mobility tables." Pp. 51-97 in N. J. Smelser and M. S. Lipset (eds.), Social Structure and Mobility in Economic Development. Chicago: Aldine.

Duncan, Otis Dudley, David L. Featherman, and Beverly Duncan.
1972 Socioeconomic Background and Achievement. New York: Seminar Press, Inc.

Elliott, Robin, L. C. Landman, R. Lincoln, and T. Tsuoroka.
1970 "U. S. population growth and family planning: a review of the literature." Family Planning Perspectives 4 (October): i-xvi.

Featherman, D. L.
1970 "Marital fertility and the process of socioeconomic achievement: an examination of the mobility hypothesis." Pp. 104-31 in L. L. Bumpass and C. F. Westoff (eds.), The Later Years of Childbearing. Princeton, New Jersey: Princeton University Press.

Fisher, R. A.
1958 The Genetical Theory of Natural Selection. (2nd revised ed.), New York: Dover.

Freedman, Ronald.
1959 "Social values about family size in the United States." International Union for the Scientific Study of Population, Vienna:173-83.
1961-1962 "The sociology of human fertility a trend report and bibliography." Current Sociology 11:35-121.

Freedman, Ronald, L. Coombs, and Larry Bumpass.
1965 "Stability and change in expectations about family size: a longitudinal study." Demography 2:250-75.

Freedman, Ronald, D. Goldberg, and H. Sharp.
1955 "Ideals about family size in the Detroit metropolitan area: 1954." The Milbank Memorial Fund Quarterly 33 (April):187-97.

Freedman, Ronald and Harry Sharp.
1954 "Correlation of values about ideal family size in the Detroit metropolitan area." Population Studies 8 (July):35-45.

Galton, F.
1892 Hereditary Genius. London.

Goldberg, David.
1959 "The fertility of two-generation urbanites." Population Studies 12 (March):214-22.
1960 "Another look at the Indianapolis fertility data." Milbank Memorial Fund Quarterly 38 (January):23-36.

Goldberg, David and Clyde H. Coombs.
1936 "Some applications of unfolding theory to fertility analysis." Pp. 105-29 in Emerging Techniques in Population Research. (9th ed.), New York: Milbank Memorial Fund.

Goldberg, David, H. Sharp, and R. Freedman.
1959 "The stability and reliability of expected family size." Milbank Memorial Fund Quarterly 37 (October):369-85.

Gustavus, Susan.
1968 "The formation and stability of ideal family size norms among young people." Unpublished Ph.D. Dissertation, Florida State University.

Gustavus, Susan and Kent G. Mommsen.
1973 "Black-white differentials in family size preferences among youth." Pacific Sociological Review 16 (January):107-19.

Gustavus, Susan and Charles B. Nam.
1970 "The formation and stability of ideal family size among young people." Demography 7 (February):43-51.

Haller, Archibald, L. Otto, R. Meier, and G. Ohlendorf.
1974 "Level of occupational aspiration: an empirical analysis." American Sociological Review 39 (February):113-21.

Heise, R.
1969 "Problems in path analysis and causal inferences." Pp. 38-73 in Edgar F. Borgatta and George W. Bohrnstedt (eds.), Sociological Methodology: 1969. San Francisco: Jossey-Bass, Inc.
1970 "Causal inferences from panel data." Pp. 3-27 in Edgar F. Borgatta and George W. Bohrnstedt (eds.), Sociological Methodology: 1970. San Francisco: Jossey-Bass, Inc.

Hollingsworth, T. H.
1957 "A demographic study of the British ducal families." Population Studies 11 (July):4-26.

Hope, Keith.
1971 "Social mobility and fertility." American Sociological Review 36 (December):1019-32.

Hutchinson, Bertram.
1961 "Fertility, social mobility and urban migration in Brazil." Population Studies 14 (March):182-9.

Jacobs, Nelson L.
1973 "The influence of occupational value orientations on the vocational development of East Texas youth: a longitudinal study." Unpublished Master's Thesis, Texas A&M University.

Kantner, J. F. and C. V. Kiser.
1954 "The interrelation of fertility, fertility planning and intergenerational social mobility." Milbank Memorial Fund Quarterly 32 (January):69-103.

Kiser, Clyde V. and P. K. Whelpton.
1951 "The interrelationship of fertility, fertility planning and feeling of economic security." Milbank Memorial Fund Quarterly 29 (January):41-122.
1953 "Resumé of the Indianapolis study of social and psychological factors affecting fertility." Population Studies 7 (November):95-110.

Koos, E. L.
1947 "Class differences in the employment of contraceptive measures." Human Fertility 12 (December):97-101.

Knapp, Melvin and V. A. Boyd.
1970 "Family size preferences among black-white adolescents in the South." Paper presented at the annual meeting of the National Council on Family Relations.

Kuvlesky, W. P. and Robert C. Bealer.
1966 "A clarification of the concept 'occupational choice'." Rural Sociology 31 (September):265-76.

Land, Kenneth C.
1969 "Principles of path analysis." Pp. 3-37 in Edgar F. Borgatta and George W. Bohrnstedt (eds.), Sociological Methodology: 1969. San Francisco: Jossey-Bass, Inc.

Lever, Michael F.
1969 "Selected occupational status projections of Southern youth: an analysis by sex, race and socioeconomic status." Unpublished Master's Thesis, Texas A&M University.

McAllister, P. C., Shannon Stokes, and Mel Knapp.
1974 "Size of family of orientation, birth order and fertility values: a reexamination." Journal of Marriage and the Family (May):337-42.

McCrory, Nancy K.
1974 "Mobility of women." Paper presented at the SSA meetings, Dallas, Texas (March).

Marcum, John P. and Frank D. Bean.
1974 "Intergenerational occupational mobility and fertility among Mexican Americans." Unpublished paper. Department of Sociology and The Population Research Center, The University of Texas at Austin (September).

Micklin, Michael.
1969 "Urban life and differential fertility: specification of an aspect of the theory of the demographic transition." Sociological Quarterly 10 (Fall):480-500.

Mullins, N. C.
1973 Theories and Theory Groups in Contemporary American Sociology. New York: Harper and Row.

Ohlendorf, George W.
1967 "Educational orientations of rural youth in selected low-income counties of Texas." Unpublished Master's Thesis, Texas A&M University.

Pelz, Donald C. and Frank N. Andrews.
1970 "Detecting causal priorities in panel study data." Pp. 342-52 in Norman K. Denzin (ed.), Sociological Methods: A Sourcebook. Chicago: Aldine Press.

Peterson, William.
1961 Population. New York: MacMillan Co.

Riemer, Ruth and Clyde V. Kiser.
1954 "Economic tension and social mobility in relation to fertility planning and size of planned family." Milbank Memorial Fund Quarterly 32 (April):167-231.

Sagi, Philip C. and Charles F. Westoff.
1936 "An exercise in partitioning some components of the variance of family size." Pp. 130-40 in Emerging Techniques in Population Research (9th ed.). New York: Milbank Memorial Fund.

Sewell, W. H., A. O. Haller, and George Ohlendorf.
1970 "The educational and early occupational status attainment process: replication and revision." American Sociological Review 35 (December):1014-27.

Scanzoni, John H.
1971 The Black Family in Modern Society. Boston: Allyn and Bacon, Inc.

Schoenberg, Ronald.
1972 "Strategies for meaningful comparison." Pp. 1-35 in Herbert L. Costner (ed.), Sociological Methodology: 1972. San Francisco: Jossey-Bass, Inc.

Scott, Wolf.
1958 "Fertility and social mobility among teachers." Population Studies 11 (March):251-61.

Sorokin, Pitirim.
1927 Social Mobility. New York: Harper and Bros.

Stycos, J. Mayone.
1965 "Social class and preferred family size in Peru." The American Journal of Sociology 70 (May):651-8.

Tien, H. Yuan.
1961 "The social mobility/fertility hypothesis reconsidered: an empirical study." American Sociological Review 26 (April): 247-57.
1965 Social Mobility and Controlled Fertility: Family Origins and Structure of the Australian Academic Elite. New Haven, Conneticut: College and University Press.

Thomas, Katheryn.
1970 "Educational orientations of Southern rural youth: an analysis of socioeconomic status and racial differences." Unpublished Master's Thesis, University of Kentucky.

Tyree, Andrea and Judith Treas.
1974 "The occupational and marital mobility of women." American Sociological Review 39 (June):293-302.

Van Landingham, Calvin L.
1970 "Relationships of occupational aspirations of youth to selected social variables in two Mississippi counties." Unpublished Ph.D. Dissertation, Mississippi State University.

Wagner-Manslau, Willy.
1932 "The inheritance of human fertility: a demonstration of its genetic basis." Trans. by E. O. Lorimer. Eugenics Review 23 (October):195-210.

Westoff, Charles F.
1953 "The changing focus of differential fertility research: the social mobility hypothesis." Milbank Memorial Fund Quarterly 31 (January) 24-38.

Westoff, C. F., Marvin Bressler, and Philip Sagi.
1960 "The concept of social mobility: an empirical inquiry." American Sociological Review 25 (June):375-85.

Westoff, C. F. and Larry Bumpass.
1973 "The revolution in birth control practices of U. S. Roman Catholics." Science 179 (January):41-4.

Westoff, C. F., E. F. Mishler, and L. E. Kelley.
1957 "Preferences in size of family and eventual fertility twenty years after." American Journal of Sociology 62 (March): 491-7.

Westoff, C. F., R. G. Potter, and P. C. Sagi.
1963 The Third Child. Princeton: Princeton University Press.

Westoff, C. F., R. G. Potter, P. C. Sagi, and E. G. Mishler.
1961 Family Growth in Metropolitan America. Princeton: Princeton University Press.

Westoff, C. F. and Raymond H. Potvin.
1967 College Women and Fertility Values. Princeton: Princeton University Press.

Whelpton, P. K. and Clyde V. Kiser.
1946 Social and Psychological Factors Affecting Fertility, Volume I. New York: Milbank Memorial Fund.

Yellin, S.
1955 "Social mobility and Familism." As presented in David Goldberg, "The fertility of two-generation urbanites." Population Studies 12 (March, 1969):214-22.

Yeracaris, Constantine A.
1959 "Differentials in ideal family size -- Buffalo, 1956." Sociology and Social Research 44 (September-October):8-11.

Zelnik, Melvin and John F. Kantner.
1974 "The resolution of teenage first pregnancies." Family Planning Perspective 6 (Spring):74-80.

APPENDIX A

FREQUENCIES BY RACE AND CLASS OF MEASURES, COMPOSITE VARIABLES, AND STRUCTURAL CHARACTERISTICS

Table A1. Mean breadwinner's SEI (BRSEI) score by educational level of breadwinner.[a]

Educational Level of Breadwinner	Mean Breadwinner SEI Score							
	Whites				Blacks			
	Father		Mother		Father		Mother	
	Mean	N	Mean	N	Mean	N	Mean	N
Not Stated	32	18	3	1	12	11	13	2
< High School	33	99	19	6	14	81	19	23
High School	40	46	47	4	15	12	28	6
Vocational Training	45	7	51	2	31	2	22	1
Some College	59	20			26	3	15	1
College	65	31	62	2	76	3	72	3

[a] When BRSEI was not reported the missing data treatment was applied. The above mean BRSEI scores by educational level of the Breadwinner was assigned to the subject. Using this treatment 52 whites and 34 blacks were assigned these computed means.

Table A2. Adjusted breadwinner's SEI score.

BRSEI SCORE	WHITES N	WHITES %	BLACKS N	BLACKS %
0-15	78	27	138	69
16-30	50	17	53	26
31-45	53	18	10	5
46-60	52	18		
61-75	34	12		
76-89	18	6		
90-96	3	1		
TOTALS	288	99[a]	201	100

[a] Variations from 100 percent due to rounding error.

Table A3. Educational level of respondent's mother (ELM).

EDUCATIONAL LEVEL	WHITE LOWER CLASS		WHITE MIDDLE CLASS		BLACK LOWER CLASS	
	N	%	N	%	N	%
< High School	88	53	26	25	143	78
High School	60	36	40	39	19	10
Vocational Training	8	5	8	8	2	1
Some College	4	2	16	15	4	2
College	7	4	13	13	15	8
TOTALS	167	100	103	100	183	100

Table A4. Occupational aspiration for desired mate (OAM) - 1966.

OAM SCORE	WHITE LOWER CLASS		WHITE MIDDLE CLASS		BLACK LOWER CLASS	
	N	%	N	%	N	%
0-15	14	13	3	5	7	5
16-30	5	4	6	9	8	6
31-45	7	6	5	8	12	9
46-60	15	14	10	15	15	11
61-75	22	20	10	15	35	26
76-89	14	13	8	12	18	13
90-99	33	30	24	36	40	30
TOTALS	110	100	66	100	135	100

Table A5. Occupational aspiration for desired mate (OAM) - 1968.

OAM SCORE	WHITE LOWER CLASS		WHITE MIDDLE CLASS		BLACK LOWER CLASS	
	N	%	N	%	N	%
0-15	12	9	1	1	7	4
16-30	7	5			14	8
31-45	11	9	3	4	12	7
46-60	14	11	10	13	14	8
61-75	25	20	15	19	42	26
76-89	29	23	17	21	29	18
90-99	30	23	33	42	45	28
TOTALS	181	100	79	100	163	99

Table A6. Occupational expectation for desired mate (OXM) - 1966.

OXM SCORE	WHITE LOWER CLASS		WHITE MIDDLE CLASS		BLACK LOWER CLASS	
	N	%	N	%	N	%
0-15	18	19	4	8	19	15
16-30	12	12	8	16	18	14
31-45	12	12	6	12	15	12
46-60	8	8	6	12	9	7
61-75	15	16	11	22	27	21
76-89	15	16	7	14	14	11
90-99	15	16	8	16	26	20
TOTALS	95	99	50	100	128	100

Table A7. Occupational expectation for desired mate (OXM) - 1968.

OXM SCORE	WHITE LOWER CLASS		WHITE MIDDLE CLASS		BLACK LOWER CLASS	
	N	%	N	%	N	%
0-15	35	29	7	10	13	9
16-30	19	15	4	5	20	14
31-45	14	11	4	5	16	11
46-60	11	9	12	17	12	8
61-75	18	15	19	26	45	31
76-89	12	10	14	19	16	11
90-99	13	11	12	17	21	15
TOTALS	122	100	72	99	143	99

Table A8. Educational aspirations for self (EA) - 1966.

EA	WHITE LOWER CLASS		WHITE MIDDLE CLASS		BLACK LOWER CLASS	
	N	%	N	%	N	%
< High School	4	3	3	3	2	1
High School	15	10	7	8	9	6
Vocational Training	64	43	18	21	69	43
Junior College	15	10	8	9	9	6
College	34	23	32	37	38	24
Additional Schooling	16	11	19	22	34	21
TOTALS	148	100	87	100	161	100

Table A9. Educational aspirations for self (EA) - 1968.

EA	WHITE LOWER CLASS		WHITE MIDDLE CLASS		BLACK LOWER CLASS	
	N	%	N	%	N	%
< High School	1	1			1	1
High School	17	11	3	3	11	6
Vocational Training	59	39	18	20	55	30
Junior College	6	4	11	13	19	10
College	43	29	29	33	40	22
Additional Studies	24	16	27	31	55	30
TOTALS	150	100	88	100	181	100

Table A10. Educational expectations for self (EX) - 1966.

EX	WHITE LOWER CLASS		WHITE MIDDLE CLASS		BLACK LOWER CLASS	
	N	%	N	%	N	%
< High School	11	7	5	6	6	4
High School	24	16	10	11	18	11
Vocational Training	63	42	21	24	71	43
Junior College	10	7	13	15	8	5
College	32	21	30	34	32	20
Additional Studies	9	6	9	10	28	17
TOTALS	149	99	88	100	163	100

Table A11. Educational expectations for self (EX) - 1968.

EX	WHITE LOWER CLASS		WHITE MIDDLE CLASS		BLACK LOWER CLASS	
	N	%	N	%	N	%
< High School	1	1			1	1
High School	49	32	12	14	22	12
Vocational Training	51	34	21	24	68	37
Junior College	9	6	8	9	21	12
College	37	24	40	45	45	25
Additional Studies	4	3	7	8	24	13
TOTALS	151	100	88	100	181	100

Table A12. Level of occupational aspiration for desired mate (LOAM)-1966.

LOAM SCORE	WHITE LOWER CLASS N	WHITE LOWER CLASS %	WHITE MIDDLE CLASS N	WHITE MIDDLE CLASS %	BLACK LOWER CLASS N	BLACK LOWER CLASS %
0-15	8	7	2	3	8	6
16-30	9	8	7	10	8	6
31-45	16	14	9	13	26	19
46-60	27	24	11	16	24	17
61-75	17	15	12	18	25	18
76-89	15	13	12	18	18	13
90-96	20	18	15	22	28	20
TOTALS	112	99	68	100	137	99

Table A13. Level of occupational aspirations for desired mate (LOAM)-1968.

LOAM SCORE	WHITE LOWER CLASS N	WHITE LOWER CLASS %	WHITE MIDDLE CLASS N	WHITE MIDDLE CLASS %	BLACK LOWER CLASS N	BLACK LOWER CLASS %
0-15	14	10	2	2	6	4
16-30	14	10			13	8
31-45	23	17	6	7	18	11
46-60	26	19	16	20	28	17
61-75	22	16	17	21	40	24
76-89	28	21	24	29	36	23
90-96	10	7	16	20	23	13
TOTALS	137	100	81	99	164	100

Table A14. Level of educational aspiration for self (LEA) - 1966.

LEA	WHITE LOWER CLASS		WHITE MIDDLE CLASS		BLACK LOWER CLASS	
	N	%	N	%	N	%
< High School	6	4	3	3	3	2
High School	28	19	8	9	16	10
Vocational Training	60	40	23	26	65	39
Junior College	14	9	14	16	31	19
College	32	21	31	35	28	17
Additional Studies	9	6	9	10	22	13
TOTALS	149	99	88	99	165	100

Table A15. Level of educational aspiration for self (LEA) - 1968.

LEA	WHITE LOWER CLASS		WHITE MIDDLE CLASS		BLACK LOWER CLASS	
	N	%	N	%	N	%
< High	1	1			2	1
High School	43	28	8	9	19	10
Vocational Training	44	29	20	23	53	29
Junior College	22	15	13	15	38	21
College	37	24	40	45	48	26
Additional Studies	4	3	7	8	22	12
TOTALS	151	100	88	100	182	99

Table A16. Intergenerational occupational mobility (IGOM) - 1966.

IGEM SCORE	WHITE LOWER CLASS		WHITE MIDDLE CLASS		BLACK LOWER CLASS	
	N	%	N	%	N	%
-61 to -75			1	1		
-46 to -69			4	6		
-31 to -45	1	1	6	9		
-16 to -30	2	2	7	10		
-0 to -15	9	8	12	18	6	4
0 to 15	11	10	18	26	10	7
16 to 30	20	18	9	13	22	16
31 to 45	26	23	10	15	33	24
46 to 60	20	18	1	1	15	11
61 to 75	14	12			26	19
76 to 90	9	8			25	18
TOTALS	112	100	68	99	137	99

Table A17. Intergenerational occupational mobility (IGOM) - 1968.

IGEM SCORE	WHITE LOWER CLASS		WHITE MIDDLE CLASS		BLACK LOWER CLASS	
	N	%	N	%	N	%
-46 to -60			2	2		
-31 to -45			3	4	1	1
-16 to -30	5	4	4	5		
-.5 to -15	16	12	17	21	3	2
0 to 15	16	12	25	31	13	8
16 to 30	21	15	14	17	19	11
31 to 45	31	23	16	20	29	18
46 to 60	22	16			44	27
61 to 75	20	14			35	21
76 to 90	6	4			20	12
TOTALS	137	100	81	100	164	100

Table A18. Intergenerational educational mobility (IGEM) - 1966.

IGEM	WHITE LOWER CLASS		WHITE MIDDLE CLASS		BLACK LOWER CLASS	
	N	%	N	%	N	%
-3			1	1	1	1
-2	2	1	1	1	2	1
-1	3	2	5	6	3	2
0	14	10	14	16	3	2
1	36	26	25	29	25	16
2	49	35	21	24	61	39
3	23	16	9	10	24	15
4	11	8	10	11	24	15
5	3	2	1	1	13	8
TOTALS	141	99	87	99	156	99

Table A19. Intergenerational educational mobility (IGEM) - 1968.

IGEM	WHITE LOWER CLASS		WHITE MIDDLE CLASS		BLACK LOWER CLASS	
	N	%	N	%	N	%
-3	2	1			1	1
-2			2	2	4	2
-1	2	1	5	6	4	2
0	15	11	10	12	7	4
1	49	35	21	25	19	11
2	31	22	17	20	45	27
3	29	21	19	23	39	23
4	12	8	10	11	33	20
5	1	1			15	9
TOTALS	141	100	84	100	167	99

Table A20. Early fertility behavior of respondent - 1972.

NUMBER OF CHILDREN	WHITE LOWER CLASS		WHITE MIDDLE CLASS		BLACK LOWER CLASS	
	N	%	N	%	N	%
0	101	56	73	68	125	63
1	57	32	25	24	44	22
2	18	10	7	7	25	12
3	3	1	1	1	6	3
4	1	1				
TOTALS	180	100	107	100	200	100

Table A21. Respondent's residence - 1966.

RESIDENCE	WHITE LOWER CLASS		WHITE MIDDLE CLASS		BLACK LOWER CLASS	
	N	%	N	%	N	%
In a city (over 2500)	32	18	41	38	39	20
In a town (under 2500)	42	23	30	28	32	16
In the country, not on a farm	52	29	26	24	72	36
In the country, on a farm	54	30	10	9	56	28
TOTALS	180	100	107	99	199	100

Table A22. Educational level of respondent's father.

EDUCATIONAL LEVEL	WHITE LOWER CLASS		WHITE MIDDLE CLASS		BLACK LOWER CLASS	
	N	%	N	%	N	%
< High School	101	62	32	31	147	83
High School	39	24	19	19	21	12
Vocational Training	4	2	5	5	5	3
Some College	12	7	16	16	3	1
College	6	4	29	29	1	1
TOTALS	162	99	101	100	177	100

Table A23. Size of respondent's family of orientation.

NUMBER OF SIBLINGS	WHITE LOWER CLASS		WHITE MIDDLE CLASS		BLACK LOWER CLASS	
	N	%	N	%	N	%
0	3	2	4	6	1	1
1-3	88	70	50	77	26	21
4 or more	35	28	11	17	99	78
TOTALS	126	100	65	100	126	100

Table A24. Marital status of respondent's parents.

MARITAL STATUS	WHITE LOWER CLASS		WHITE MIDDLE CLASS		BLACK LOWER CLASS	
	N	%	N	%	N	%
Married	130	87	81	92	120	73
Other[a]	19	13	7	8	45	27
TOTALS	149	100	88	100	165	100

[a] Other includes divorced, separated, one parent or both parents not living.

Table A25. Respondent's religious affiliation.

RELIGION	WHITE LOWER CLASS		WHITE MIDDLE CLASS		BLACK LOWER CLASS	
	N	%	N	%	N	%
Protestant	156	86	94	88	189	95
Catholic	24	13	12	11	6	3
Jewish	1	1	1	1	3	2
TOTALS	181	100	107	100	198	100

Table A26. Results of tests for state differences: probability of chi-square and degrees of freedom.

	White Lower Class		White Middle Class		Black Lower Class	
	P(X^2)	D.F.	P(X^2)	D.F.	P(X^2)	D.F.
LEA66	.023[a]	8	.015[a]	8	.174[a]	8
LEA68	.221[a]	8	.238[a]	8	.315[a]	8
LOAM66	.126	6	.895[a]	6	.944	6
LOAM68	.974[a]	8	.635[a]	8	.389	8
IGEM66	.028[a]	8	.041[a]	8	.316[a]	8
IGEM68	.137[a]	8	.045[a]	8	.012	8
IGOM66	.393	6	.451[a]	3	.711	6
IGOM68	.757	8	.340[a]	4	.048	8
Fertility	.097[a]	15	.593[a]	10	.499[a]	10
ELM	.951[a]	10	.069[a]	10	.108[a]	10

[a] Greater than 20 percent of the cells had an expected frequency less than or equal to 5.

VITA

NAME: Carolyn Delores White

DATE OF BIRTH: October 24, 1948

PLACE OF BIRTH: Lake Village, Arkansas

PARENTS NAME: Carl Lehman White
Nora Dell Meyer

PERMANENT ADDRESS: Route 1, Box 100
Eudora, Arkansas

EDUCATIONAL BACKGROUND:

Louisiana State University, August 1970 -- B.S. in Mathematics

RECORD OF EMPLOYMENT:

August 1970 - January 1972	Systems and Research Programmer, Louisiana State University Computer Research Center
January 1972 - December 1972	Research Assistant, Department of Agricultural Economics and Sociology, Texas A&M University
June 1973 - December 1974	Research Assistant, Department of Agricultural Economics and Sociology, Texas A&M University

This thesis was typed and printed by Glidewell Printers, Bryan, Texas.